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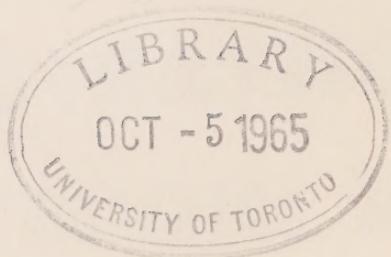


ONTARIO

REPORT
OF THE
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ONTARIO
MILK INDUSTRY
INQUIRY COMMITTEE

JANUARY, 1965

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**REPORT
OF THE
ONTARIO
MILK INDUSTRY
INQUIRY COMMITTEE**

JANUARY, 1965



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CHAIRMAN:
S. G. HENNESSEY

MEMBERS:
J. E. McARTHUR
F. E. WOOD



MILK INDUSTRY INQUIRY COMMITTEE

SECRETARY:
T.G. HICKS
ONTARIO DEPARTMENT
OF AGRICULTURE
PARLIAMENT BUILDINGS
TORONTO

ASSISTANTS TO COMMITTEE:
PRICE WATERHOUSE & CO.
CHARTERED ACCOUNTANTS

January 29, 1965

The Honourable Wm. A. Stewart,
Minister of Agriculture,
Parliament Buildings,
Toronto, Ontario

Dear Mr. Minister:

The Milk Industry Inquiry Committee, established at your suggestion by Order-in-Council dated the 30th day of May, 1963, is now able to present its findings and recommendations. There are four Parts to this Report:

- A - the Milk Industry in Ontario, past and present, with the events leading up to the establishment of this Committee;
- B - principal conclusions and recommendations which include an Ontario Milk Commission and a Milk Producers' Pool;
- C - other observations, commentary, and minor recommendations;
- D - acknowledgments and supporting appendices.

The Committee wishes to recognize the very important contributions made by the many individuals and organizations whose names are recorded in Part D. Without their experience, advice and co-operation we would have accomplished little in our efforts to deal with the subtle complexities associated with the milk industry. Finally, we record your unlimited support and the full freedom which permitted us to function with complete independence.

Respectfully submitted,

S. G. Hennessey

J. E. McArthur

F. E. Wood



EXECUTIVE COUNCIL OFFICE

Copy of an Order-in-Council approved by His Honour the Lieutenant Governor, dated the 30th day of May, A.D. 1963.

The Committee of Council have had under consideration the report of the Honourable the Minister of Agriculture, dated the 29th day of May, 1963 wherein he states that,

WHEREAS the production, marketing, transporting, processing and distribution of milk, fluid milk, manufactured milk products and fluid milk products is of great importance to the agricultural economy of Ontario;

AND WHEREAS the milk industry has been developed in Ontario through measures the purposes of which were to assure quality standards and orderly and effective marketing of milk products;

The Honourable the Minister of Agriculture therefore recommends that a committee be formed consisting of the following persons and such other members as the Lieutenant Governor in Council may appoint from time to time:

Professor S. G. Hennessey, University of Toronto, Chairman

Mr. John E. McArthur, Toronto, Member, and

Mr. Frank E. Wood, Toronto, Member,

to inquire generally into all matters pertaining to the milk industry in Ontario and without restricting the generality of the foregoing, to inquire into,

1. The existing marketing plans for milk, the legislation respecting the marketing of fluid milk under The Milk Industry Act, and the various plans for unified marketing of milk which have been and are being considered, with specific reference to plans and proposals for the marketing of milk for fluid and manufacturing purposes;
2. The costs and methods of producing, transporting, processing and distributing milk and milk products;
3. The current pricing structures, the methods of arriving at prices paid to producers for milk for fluid and manufacturing purposes, and the pricing of milk according to utilization;
4. The payment for milk based on its composition and quality;
5. The quality requirements for milk in relation to its utilization;
6. The methods of increasing the consumption of Ontario milk and milk products;

7. The marketing needs of milk based on domestic utilization and export possibilities;
8. The establishment and application of producer marketing quotas for milk;
9. The economics of the competition among various milk products;
10. Problems arising in interprovincial and export trade in milk and their effect on the milk industry in Ontario;
11. The effect of national dairy policies on the milk industry in Ontario and the co-ordination of such policies with milk industry policies in Ontario.

The Honourable the Minister of Agriculture further recommends that the firm of Price Waterhouse and Company, Chartered Accountants, be engaged to assist the Committee and that Mr. St. Elmo V. Smith of that firm be authorized to take part in inquiries made by the Committee and when so doing have the status of a member of the Committee.

And the Honourable the Minister of Agriculture further recommends that the Committee hold hearings at such times and places as may be necessary and for such purposes the Chairman or Acting Chairman shall have all the powers of a commissioner under The Public Inquiries Act.

And the Honourable the Minister of Agriculture further recommends that the Committee consult with such person or persons having experience and technical knowledge in the milk industry as the Committee deems necessary from time to time.

And the Honourable the Minister of Agriculture further recommends that the Committee report to the Honourable the Minister of Agriculture and make,

- (a) such recommendations in respect of a plan for the marketing of milk as in the opinion of the Committee would be applicable to conditions in Ontario,
- (b) such other recommendations as in the opinion of the Committee will effectively promote the production, marketing, transporting, processing and distribution of Ontario milk, fluid milk, manufactured milk products and fluid milk products.

And the Honourable the Minister of Agriculture further recommends that Mr. T. G. Hicks of the Department of Agriculture, act as secretary of the Committee.

The Committee of Council concur in the recommendations of the Honourable the Minister of Agriculture and advise that the same be acted on.

Certified,

(sgd.)
J. J. YOUNG,
Clerk, Executive Council.

PRINCIPLES GUIDING THIS COMMITTEE

This Committee has agreed that many principles have validity in the milk industry. These have provided the basis for our reasoning and are reflected in our recommendations.

1. Efficiency for the milk industry.
2. Equal opportunity for everyone to engage in any aspect of the milk industry, and equitable treatment for all.
3. Major reliance on the free forces of supply and demand to establish prices, allocate resources, and distribute income; confidence in the market-place as the testing ground for new products, methods, and ideas.
4. Collective action as a prerequisite to appropriate balance of power within the industry.
5. A direct interest by consumers in the welfare of the milk industry.
6. Competition faced by milk and milk products from a growing variety of commodities and by fluid milk from milk in many other forms.
7. The greater suitability of some areas for the production of milk than others when all factors, including cost of production and transportation, are considered.
8. Specialization and large-scale operation often result in efficient production, processing, and distribution.
9. The inevitability and desirability of continuing, important, and rapid technological change.
10. Minimum practicable degree of governmental control and participation.
11. Government responsibility for cushioning painful economic adjustments and for compensation to those who bear the major burden of change.
12. The economic interdependence of provinces and of Canada and other nations.

SUMMARY OF PRINCIPAL RECOMMENDATIONS

1. The creation of the Ontario Milk Commission to supersede the present Milk Industry Board, and to assume broader responsibilities and authority.
2. The establishment by Government of the Milk Producers' Pool replacing certain existing producer organizations, to be controlled by producers and to have authority to sell all fluid milk, and responsibility to buy all top-quality milk offered to it.
3. Subject to the Pool's position, full freedom for all producers of milk, including cream shippers, to market their products to the best advantage.
4. Southern Ontario to be regarded as one marketing area; northern Ontario to continue to function as a number of small markets.
5. Assumption of greatly increased responsibility for the quality of milk and milk products by all producers, transporters, processors, and other handlers.
6. Independent testing of all raw milk for quality and composition in laboratories operated by the Ontario government.
7. Intensive study of the basis of payment for raw milk and of the possibility of adopting a new method, as soon as practicable.
8. Compensatory payment to present holders of fluid-milk quotas to be made by the Ontario government at the rate of, say, \$5 per pound per day.
9. Immediate appointment of a Board of Administration under Section 7 (1) (f) of the Milk Industry Act, to assume all of the powers vested in the Ontario Cheese Producers' Marketing Board.
10. Decisive action by the Ontario Milk Commission, the Milk Producers' Pool, and all other segments of the industry in a determination to achieve production of *only* top quality milk at a very early date, and to eliminate all milk and milk products of inferior character.

11. Early disappearance of protective arrangements, including marketing and distribution areas, fluid-milk quotas of the present kind, formula pricing, and detailed transport licensing.
12. Adoption of policies and methods that will result in a constant flow of milk through the year, and so permit more effective planning and fuller utilization of industry resources.
13. Analysis, reorganization, and continued review of transportation arrangements in order to minimize or eliminate duplication of movement, waste, and inefficiency; continued conversion to bulk handling.
14. Increased research activity in every phase of the industry in order to cope with technical problems, to improve managerial performance, and to extend the demand for milk and milk products.
15. Fuller disclosure of pertinent information, as examples, on producers' statements and consumer packages.
16. Simplification and clarification of the role of governments, federal, provincial, and municipal, as the industry grows in strength and displays capacity for greater independence.
17. Fuller statements of long-range policies by governments, but without long-term inflexibility, in order that the industry have the best possible bases for decision-making and maximum utilization of resources.
18. Close co-operation and frequent consultation by the provinces, particularly Ontario and Quebec, to deal with matters of mutual concern, and to achieve appropriate action at the federal level.
19. Flexibility in attitude, organization, and pricing in order to encourage innovation, to permit adoption of new ideas and facilities, and to adapt the industry to changing circumstances.
20. Vigilance by all to prevent creeping complexity.

Adoption of these recommendations will result in stronger economic units in all phases of the industry, the elimination of the uncertainty and suspicion that hamper progress at present, and ultimately, a strong modern milk industry in this province.

PART A

THE ONTARIO MILK INDUSTRY

Milk has been a very important staple food in what is now the province of Ontario since the first agricultural settlement by Europeans. It is convenient, and reasonably precise, to consider that the milk *industry* came into being one hundred years ago, in 1864, with the establishment of the first cheese factory near Ingersoll in Oxford County.

The present milk industry is comprised of producers, transporters, processors, manufacturers, and distributors, wholesale and retail. Individuals and organizations vary infinitely in their efficiency and economic significance. The industry is divided, quite clearly, into four principal segments—the market for fluid milk, the manufacturing sector, the production of cheese, and a segment concerned with farm-separated cream.

There is in the industry an undesirable multiplicity of organizations with overlapping memberships and conflicting objectives. The major theme for the past fifteen years has been the unsuccessful efforts of the producer organizations to come to recognition of mutual interests and of the folly of narrow, partisan behaviour. There is conclusive evidence that sensible compromise and constructive joint action will not be attained on a voluntary basis.

SECTION 1

HISTORY AND PRESENT ORGANIZATION

- (a) Magnitude and Structure of the Milk Industry
- (b) Production
- (c) Transportation
- (d) Processing
- (e) Distribution
- (f) Organizations in the Industry
- (g) Pricing
- (h) Governments

Since its beginnings there have been many fundamental changes in the Ontario milk industry. Technological advances have revolutionized dairy farming. Improvements in transportation have broadened milksheds and milk markets. There has been a succession of important innovations in milk processing and distribution. Economic units have steadily grown larger, and in recent years the number of participants in the industry has steadily diminished. Producers and processors have established many organizations. A few powerful manufacturers and distributors, most of them controlled outside Canada, have emerged and dominate those segments of the industry. Pricing arrangements have become increasingly complex and formalized. Governments have undertaken to regulate and influence activities and developments at every level of the industry.

(a) Magnitude and Structure of the Milk Industry

The milk industry has long occupied a prominent position in the economic life of this province. Milk production continues to be one of the principal activities on Ontario farms. In 1963, 6.5 billion pounds of milk was produced, with an estimated farm value of \$214 million. When the value of transporting, processing, and distributing milk is added, the total significance of the industry in this province must be reckoned at about twice this amount. The welfare of the milk industry touches the lives of most citizens of Ontario and is of primary importance to hundreds of thousands of them.

For many years butter and cheddar cheese were the principal milk products in this province. The United Kingdom became an

important export market and provided the main impetus to the early development and expansion of the industry. Throughout the latter part of the nineteenth century, cheese exports increased significantly, and by the early 1900's exceeded 200 million pounds per year. Most of the exported cheddar came from Ontario factories.

After the peak years of the early 1900's, the trend in cheese exports was reversed. Between 1900 and 1930 total exports of cheddar from Canada fell from about 190 million pounds to about 85 million pounds annually. During this same period yearly production of cheddar in Ontario factories declined from about 130 million pounds to approximately 80 million pounds. Meanwhile, creamery butter replaced cheese as the principal manufactured product, and as urban areas grew the fluid-milk trade became an important sector of the industry. Fluid milk includes standard, homogenized, partly-skimmed, and skim-milk, and a variety of creams.

In 1963, about one-third of the milk produced in Ontario was purchased by licensed commercial dairies. The milk-fat from a similar quantity found its way into butter. Of the remainder, the principal end uses were cheddar cheese, 12 per cent, evaporated milk, 4 per cent, and a whole-milk powder, less than 3 per cent of total production. Powdered skimmed milk was produced in conjunction with other operations, principally the production of butter.

A number of pertinent statistical tables will be found in Part D, Section 5 of this Report.

(b) Production

From earliest times milk production in Ontario has tended to concentrate in two regions, that in the west centred in Oxford County, and the one in the east around Stormont and Dundas Counties. It should be noted that after 1900 dairying became more generally scattered throughout the province in response to the growth of fluid-milk markets outside the main producing areas, and as a result of improvements in transportation.

Prior to 1900, milk production was primarily a summer activity, particularly in the eastern counties where poor soil did not lend itself to grain growing. This seasonal pattern of production persisted as long as the cheese factory was the major outlet and butter was manufactured on the farm. As the number of creameries increased, however, some cheese patrons began to extend their milking season to ship cream during the winter. With the expansion of fluid-milk markets, the development of concentrated milks, the use of corn and other winter feeds, and increased capital investment, year-round dairying gradually became more common, particularly in southwestern Ontario.

Milk production up to the turn of the century was usually carried on as part of a general farming operation which included the raising of hogs, beef, and grain crops. Prior to 1900 most herds were made up of dual-purpose cattle such as Durhams and Short-horns. As milk production became a more specialized operation, and was conducted on a year-round basis, special dairy breeds such as Ayrshires, Guernseys, Holsteins, and Jerseys were introduced. Generally, methods and equipment used in milk production were simple and crude. Very little milk was cooled, and wooden pails were common. The sanitary practices and animal husbandry general today were largely unknown, as witnessed by the frequent ravages of tuberculosis and other diseases.

Since those early days, dairy farming in Ontario has changed quite dramatically. Milking machines, pipelines, tractors, hay balers, mechanical harvesters, gutter cleaners, and other mechanical devices have been widely adopted. Artificial insemination is gradually replacing natural breeding. The use of veterinary services and of biological and chemical aids to improve strains and control disease has become an accepted part of life. Seasonal production is less important than formerly. Grain feeding has become widespread. Leading producers have installed milk houses, bulk tanks, and milking parlours. Many large farms no longer attempt to grow all their own feed.

The new machinery and equipment cut down the labour involved in producing milk. In the 1930's the physical efforts of the dairy farm operator, his family, and any hired help, were the principal resources required in addition to farm and herd. As labour became expensive relative to machines and other capital inputs, labour-saving devices took over a wide range of activities, from raising feed to cleaning stables. This substitution has increased efficiency, but has also required a steadily rising level of investment, and today, capital is a major requisite for the operation of an up-to-date dairy farm.

Many smaller producers and those unwilling or unable to keep abreast of these developments have gradually dropped out of the industry. Some have given up milking to concentrate on other activities, while others have abandoned farming altogether. A substantial number of them—mostly older farmers—continue to produce milk. In short, milk production has become increasingly a specialized undertaking on fewer, larger, well-equipped farms, operated by men who consider themselves professional dairymen.

The technological advances since the 1930's have been accompanied by a very great reduction in the number of farms producing milk and cream. In 1931 Ontario had approximately 150,000 farms with milk cows, and about two-thirds of this number were cream

shippers. Today there are about 70,000 farms with milk cows, and fewer than 30,000 cream-shipping farms remain.

The size of the average milking herd has steadily grown larger. In 1931 there were some 1.1 million milk cows spread over about 150,000 farms, or an average of about seven cows per farm. Today Ontario has about 950,000 milk cows on less than half the number of dairy farms, that is, about fourteen cows per farm. In the 1930's few producers milked eighteen cows. In 1961, by contrast, almost 30 per cent of all Ontario producers had herds of eighteen or more cows, but many farmers continued with very small operations.

These changes in size, character, and method of operation have made dairy farming much more productive. In 1931 the total milk output in Ontario amounted to 5.2 billion pounds, or about 35,000 pounds per farm. By 1963 total output had risen to 6.5 billion pounds, or almost 100,000 pounds per producing farm. Larger herds, of course, accounted for much of the improvement. However, average output per cow also rose substantially over these three decades—from less than 5,000 pounds per year in the thirties to about 6,900 pounds per year in 1963. Among the factors responsible for this rise in output per cow were the trend to year-round milking, more careful breeding, scientific culling of low-producing cows, better feeding and improved husbandry.

Another consequence of these changes in dairy farming has been some levelling out of milk production over the year, but winter milk production still falls well below the yearly average. Much of this drop is due to many farmers with small herds not milking in winter. On a growing number of farms production is more nearly level throughout the year.

Other aspects of dairy farming have also undergone significant changes since the 1930's. For example, interest and participation in cow testing programmes have steadily broadened. Today many progressive dairy farmers participate in Record of Performance and Dairy Herd Improvement Association, or other measuring schemes. All important breeders, in particular, have come to rely on the results of such programmes to improve their herds, and to sell pure-bred animals.

There has been differentiation of fluid milk along breed lines for many years. This took a new turn in the early 1950's when public taste swung away from the high-fat milk produced by Jersey and Guernsey cows. To counteract this shift, the Channel Islands producers, in co-operation with a limited number of distributors, embarked on an aggressive campaign to promote Jersey and Guernsey milk reduced to a 2 per cent fat content, under new trade names. This action was very successful, and by the 1960's the more than 1,700

Channel Islands producers had regained a position of importance in the Ontario fluid-milk market. Recently, some Ayrshire producers have followed this lead and are now promoting their milk as "Ayrshire Extra".

Present trends point to a continuing consolidation and modernization of milk production in Ontario. There are still 35,000 to 40,000 milk and cream producers with herds of twelve cows or fewer who find it increasingly difficult to derive a satisfactory income. Cream producers, in particular, are likely to decline steadily in numbers. At the same time there is a great opportunity for further improvement in average output per cow. Some herds in Ontario already yield 10,000 to 12,000 pounds of milk per cow annually, and even larger yields are not uncommon elsewhere. In Ontario the average output in 1961 was slightly in excess of 6,300 pounds. These figures indicate the substantial latent capacity to expand milk production under current conditions. As more farmers specialize in milk production and use the mechanical and technical aids already available, production per cow and farm will increase greatly. In the not distant future we may expect to see fewer, better-equipped producers with superior cattle supplying Ontario's raw-milk requirements.

(c) Transportation

Until about forty years ago much milk used in manufacturing was transported by horse and wagon and many farmers took their own milk to the factory. Frequently, one producer agreed to collect and haul the milk of several neighbours along with his own. With horse and wagon, loads were small, hauling was costly, and milk collection routes seldom ranged farther than five or six miles around a plant. The multitude of small cheese factories and creameries, often only a few miles apart, reflected the limitations of this method of transportation.

In those early days, milk and cream were shipped in a variety of containers holding as little as five gallons or as much as thirty gallons. The factory usually owned the containers and assumed responsibility for their cleaning and repair. The installation of mechanical can washers began during the 1920's, and plants gradually moved toward standard sizes: the eight-gallon can for milk and the five-gallon can for cream.

By World War I, milk trains had become important haulers to some of the larger plants, particularly dairies and creameries in large cities. The milk train was a major advance in transportation in that milk and cream could be shipped longer distances in large quantities at low cost. The majority of farms and factories, however, were too far from railway lines to profit by this new method of

hauling. For them, horse-and-wagon hauling persisted until the twenties, and in some areas well into the thirties, before it was replaced by the motor truck.

The motor truck revolutionized milk transport. Trucks could transport milk faster, farther, and in larger quantities than the horse and wagon, and at a lower cost per can. This economic superiority became more evident as vehicles, roads, and highways improved. By World War II trucks had virtually eliminated the horse and wagon. A few producers acquired trucks and continued to haul their own milk, but in the main the transporting function was turned over to independent truck owners, and milk hauling developed into a specialized commercial activity.

Motor trucks also replaced the milk train. By the end of World War II, except for a few long hauls between country receiving plants and large city dairies, trains had ceased to be important transporters of milk and cream.

Since 1927, "for hire" transportation of milk has been regulated under the Public Commercial Vehicles Act, and truckers have been required to be licensed and insured. This has eliminated many earlier abuses and given producers some protection against losses resulting from irresponsible operators.

The most significant development in milk transportation in recent years has been the introduction and rapid spread of bulk hauling. Under the bulk system, the familiar eight-gallon can has been replaced by a large holding tank on the farm. The milk is refrigerated in the farm tank and collected, usually every second day, by pumping it into a specially equipped tank truck. This system has eliminated the task of loading and unloading cans by hand. More important, it has reduced by half the number of pick-ups necessary to deliver a producer's milk to the plant. The largest bulk trucks can carry more than 45,000 pounds, that is, about 18,000 quarts of milk. The bulk method of transporting has important economic advantages over the older can method of shipment.

Bulk handling of milk was first introduced in Ontario by a relatively small dairy in Oshawa in 1953, and by the end of 1955 about 450 producers had bulk tanks. In subsequent years the rate of adoption increased sharply, particularly among fluid-milk producers. In the manufacturing-milk sector the bulk method did not appear until 1958, after which it gained steadily in popularity. By 1963 some 163 dairies and 36 processing plants, supplied by about 7,300 fluid-milk shippers and about 900 manufacturing-milk shippers respectively, had converted to the bulk handling of milk.

Bulk handling and hauling of milk have brought important changes throughout the industry. For the producer, the new method

has meant additional investment in a bulk tank and sometimes a milk house. As a result, some producers have been forced out of the fluid-milk market and others have stopped producing milk entirely. Those producers who have installed bulk tanks have tended to increase the size of their herds and the level of their output. For processors, bulk handling has made possible economies in milk storage and in plant operation. For example, can washing and handling have been eliminated. On the other hand, most plants have relinquished ownership of and responsibility for the shipping container, and have less control over the quality of milk from individual farms.

With bulk handling the function of the milk transporter has become even more important than in the past. He acts as carrier and a link between the producer and plant, as before, but also has assumed a new responsibility for the shipping container, and must now do the initial grading and take samples of milk. This expanded role has necessitated compulsory training courses for bulk tank transport drivers, and all must be licensed as qualified graders and samplers.

The advances in milk transporting over the last thirty years have greatly modified the supply side of Ontario's milk industry. Milk trucks, improved roads, and bulk hauling have broadened milk-sheds, and the traditional boundaries have largely disappeared. The Toronto Market is supplied by producers spread over half of southern Ontario; some milk is transported more than 150 miles.

These changes have brought greater flexibility in choosing plant locations and have resulted in much consolidation of processing facilities in large-scale centralized operations. New market opportunities have become available to producers. Interregional and inter-market movements of milk have been facilitated.

(d) Processing

A hundred years ago much milk was processed into butter or cheese at the farm. With the establishment of cheese factories farm processing gave way to factory processing because of the advantages of specialization and larger scale of operation. In cheese-making, the shift to factories was rapid. On the other hand, butter-making continued to be primarily a farm operation until after 1900. Production of creamery butter in Ontario did not exceed the volume of farm-made butter until about 1920. In the fluid-milk field, the introduction after 1900 of bottling, pasteurization, and other sanitary requirements forced out many farmer-distributors.

The factory system of processing brought numerous changes in operating arrangements. Home-made equipment, manual methods,

and rule-of-thumb management gradually gave way to mechanical devices, power-driven machinery, and standardized procedures. In butter-making the centrifugal cream separator replaced gravity separation. Mechanical refrigeration took the place of ice. New methods and equipment came more slowly in cheese factories, and manufacturing continued as an art. The capital investment required to engage in the fluid-milk business grew substantially as expensive pasteurizing, bottling, and other equipment was introduced. The acceptance of the Babcock test to measure the milk-fat content of milk facilitated standardized production on a large scale.

Since 1910 there has been a steady trend toward consolidation and amalgamation of processing plants. This was particularly evident in the cheese sector where formerly it was not uncommon to find two or more small factories at a country crossroads. In addition, many cheese factories shut down because their patrons were attracted to creameries or to the fluid-milk markets in urban centres. Following the introduction of the motor truck for cream collection, creameries began to consolidate into fewer, larger units. Competition rapidly reduced the number of enterprises engaged in the distribution of fluid milk.

Milk processing has undergone rapid and radical changes since 1930. New technology and machines of great variety have been developed. New products such as butter oil, milk powders, and concentrated liquid milk have appeared. New processes such as homogenizing, clarifying, and instantizing have been perfected. There have been notable advances in packaging, refrigeration, materials handling, plant sanitation, and quality improvement. Specialized high-speed machines have replaced manual methods. Automatic measuring and other complicated control devices have been substituted for human judgment. In short, milk processing has become a highly complex and mechanized manufacturing activity.

Pasteurization was a major innovation in the processing field, and in 1938 became generally compulsory. Today nearly all bottled milks and all manufactured milk products, except raw-milk cheddar cheese, are subjected to an initial pasteurizing process. In recent years the old method of batch pasteurization has given way to a high-temperature, short-time process. This new method results in a continuous flow of milk through the pasteurizing stage and increases the effective capacity of plants.

Many other developments have taken place. Improved methods of evaporation and separation have increased processing efficiency. Stainless steel equipment and in-place cleaning have improved plant sanitation. Power conveyors and automatic machines have made possible a continuous assembly-line operation in some factories.

The outstanding feature in this transformation of milk processing over the last three decades has been the substitution of machines for men. All of the processing plants have not come to the same degree of mechanization, but in modern establishments, of which there are many, heavy physical labour has been eliminated for the most part. In cheese-making, for example, mechanical agitation has largely replaced manual efforts. Similarly, in butter-making, the loading and unloading of churns by hand and the printing and wrapping of butter by hand have become obsolete. In fluid-milk plants automatic washers, fillers, stackers, and other sophisticated equipment have been introduced, and bulk handling has eliminated the labour required to receive, wash, and return cans.

The introduction of new methods and machines in milk processing has necessitated heavy capital investment. Sometimes entire plants have been scrapped and replaced by modern facilities using automatic equipment and a minimum of labour. The higher fixed costs entailed in this increased investment have created pressures to increase output and extend markets in order to use facilities more nearly at full capacity and so achieve lower unit costs. As a result, smaller factories and those that have failed to keep abreast of the latest methods have found it more difficult to compete. Many have gone out of business, while others have been amalgamated into larger units. At the present time many processing plants have unused capacity, which suggests that there will be continuing competitive pressures on the smaller plants lacking the most efficient equipment.

There has also been a trend toward greater diversification within processing plants. For example, a few creameries have installed cheese vats, while many milk-powder factories have branched out into butter-making. Farm-separated cream now accounts for less than one-half of the butter manufactured in Ontario. Also, as new uses have been found for whey, lactose, and casein, more factories have installed equipment to recover and process these by-products. The manufacture of cottage cheese has proved attractive to a larger number of plants, including fluid-milk plants. As a general rule, however, this multi-product activity has not extended to plants specializing in such products as ice cream, evaporated and condensed milk, or whole-milk powder.

One of the reasons for the shift to multi-product processing is the greater flexibility inherent in a combined operation. In recent years the ability to produce alternative products has proved advantageous to many plants because of the uncertainties of export markets and government policies. Diversification has also enabled plants to adjust more rapidly to new market opportunities.

As processing plants have decreased in number and increased in size and complexity, a few organizations have established a

dominant position in the milk manufacturing sector. Control and decision-making have become increasingly concentrated in the hands of the large international companies. The rise of these substantial corporations has contributed much to the progress and development of the industry, without, in our opinion, seriously undermining the competitive character of Ontario milk markets. In the future, it seems likely that the economics of processing will continue to favour large-volume operations, and that we may expect a continuing and extending concentration of economic power in the hands of the large multi-product firms.

(e) **Distribution**

Prior to 1900, most fluid-milk distribution was carried out directly by the dairy farmers adjacent to towns and villages. The farmer transported his milk by horse and wagon and ladled it out of a milk can into a pitcher or other container provided by the consumer. As urban markets became larger, and fluid-milk consumption expanded, specialists entered the distribution business, buying milk from farmers and distributing it door-to-door to house-holders. By the early 1900's, sizeable dairies were established in the cities, and milk was packaged in bottles. Many producer-distributors continued to sell their milk directly in some small centres until 1950. The few producers who are involved in distribution today are really engaged in two different but related businesses. They cannot be considered to distribute incidentally, as did their predecessors, because of the relative complexity of even the simplest processing and distributing arrangements.

The pattern of distribution for Ontario cheese was established by the export market for many years. Montreal was the trading centre where produce wholesalers and the agents of British importers met. Most cheese was sold at many local exchanges and then transported to Montreal for storage and export to Great Britain. Cheese for local consumption was sold either directly by the factory to consumers and near-by shops, or through food wholesalers to merchants and retailers.

Farmers, and their wives, made most of the butter in this province until fifty years ago. Much of this butter was sold directly to the consumer at public markets or on a home-delivered basis. The remainder was sold or bartered at local stores. Butter made earlier in this century at the many small Ontario creameries was bought by wholesalers and country buyers. These middlemen, in turn, placed the butter in cold storage and distributed it to merchants and retailers throughout the year.

The last three decades have witnessed important modifications

in the distribution of milk and dairy products. Since 1945, in particular, the changes have been rapid and dramatic.

In the fluid-milk trade, the traditional door-to-door method of distribution has declined significantly. Prior to World War II, practically all fluid milk and cream was delivered directly to the consumer's door. Deliveries were made seven days a week, sometimes twice a day. Now, in almost all Ontario markets there is five-day delivery, and many consumers purchase their milk in supermarkets and other stores.

Many factors brought about this shift from home delivery to store distribution of fresh milk. Growth of urban markets, improved refrigeration in the home and store, greater mobility of consumers, and aggressive merchandising by supermarkets played a part, but the most important and obvious reason for the change has been that the costs of store distribution are less than those required for home delivery. The result has been lower prices to store customers in most markets.

A leading Toronto distributor has estimated that it costs $18\frac{1}{2}$ c to deliver a three-quart jug of milk to a consumer's door, but only $3\frac{1}{2}$ c to deliver the same jug to a retail outlet. The retail store method of distribution has been attractive to the consumer because of the price advantage.

Retailers have used milk to attract customers, very often as a loss leader. Dairies have had varied experiences as to the price which they have been able to obtain in wholesale transactions with retailers. In some cases they have received as much per unit, or almost as much, from retailers for sizeable quantities as from door deliveries of a single quart. In others the margin on sales to retailers has been a very small profit, or even a loss. The pressures exerted by large chain operations are very great indeed, and dairies have been greatly concerned. Much of the future of the industry seems to centre in these relationships.

A recent innovation in the distribution of milk and dairy products has been the dairy specialty stores, which, because they pioneered in introducing the now familiar three-quart jug, are generally known as "Jug Stores". The dairy specialty store, like the supermarket, operates on a cash-and-carry basis, but it emphasizes dairy foods and merchandises only a limited number of other staple items. Until now, these Jug Stores have been confined mainly to the Toronto area, where there are more than one hundred in operation. There is every indication that stores of this kind will soon be found in many other centres.

Large-volume outlets such as restaurants, hotels, schools, hospitals, and other institutions have also become increasingly impor-

tant in fluid-milk distribution. In large markets there is usually keen competition for this wholesale business. In smaller communities, distributors sometimes agree to share such accounts. There are no accurate figures but one estimate is that supermarket, store, and institutional sales now account for more than 45 per cent of fluid-milk sales in Ontario.

There have been important changes in the packaging and merchandising of milk during recent years. Paper cartons and containers of various sizes have been introduced in practically all fluid-milk markets. The traditional one-quart container now accounts for only half of all fluid-milk sales, and more than 25 per cent of all fluid milk and cream is packaged in paper cartons. Supermarkets have installed special display counters for easy self-service by shoppers. Dispensing cabinets for milk and dairy products have been developed for smaller stores and non-food outlets. Many distributors have added dairy bars to their premises.

One of the most significant trends over the last thirty years has been the steady decline in the number of milk distributors. In 1936 there were about 650 regular distributors and almost 1,000 producer-distributors operating in Ontario. Today there are about 400 regular distributors, and producer-distributors have practically disappeared. The consolidation has been most evident in the larger urban centres. In Toronto, there were more than seventy dairies in 1939; today seventeen serve a much larger market. Many of those that disappeared were absorbed by the large chain dairy organizations.

Consolidation into fewer, larger distributing units was the result of many forces. The replacement of horse-drawn delivery wagons by motor trucks gave each vehicle a wider range of operation, and led to greater competition for customers. Technological advances in processing increased capacity and carried over into the distribution side. The smaller distributors were unable—or lacked the vision—to invest in the new facilities and equipment that were necessary if they were to remain competitive.

The market which could be served by a given distributor steadily enlarged because of improved transport and unused processing capacity, to identify two important factors. Competition across milk market boundaries, however, has been largely precluded by government restrictions. At present, each distributor is licensed to sell milk only within a specific territory—usually the community in which he is located. Improved transportation, better refrigeration, new containers, and the trend to store sales are gradually undermining this system of artificial distribution areas. There are many indications that pressures have built up to the point where such

restrictions can no longer be controlled. The forces just noted are sound argument to support the contention that such limitations should be removed.

In recent years, labour unions have become more important in the milk distributing business. The larger dairies have been organized by either the Teamsters' Local 647, Milk and Bread Drivers, Dairy Employees, Caterers and Allied Employees, or Retail, Wholesale and Department Store Union, AFL: CIO: CLC, which recently claimed some 2,400 and 3,800 members respectively, many engaged in milk delivery. The unions have resisted further reductions in the number of delivery days. Their general reluctance to accept lower commissions which might enable dairies to offer volume discounts to householders is one of the reasons why door-to-door sales have lost out so heavily to store sales. Non-union distributors generally enjoy more flexibility and freedom in dealing with employees and in determining business policies.

The broadening of milk distribution to include other products such as fruit juice, eggs, and bread has permitted a wider allocation of overhead costs. Consumers have benefited through a wider choice and often lower prices. At the same time, however, there has been a narrowing of control into fewer and larger companies. The large chain dairies have acquired a substantial portion of the fluid-milk business in Ontario. Chain supermarkets have built up a strong position as buyers of milk, butter, and cheese. Similar developments in other food industries suggest that downward pressure on raw material prices may be expected to follow from this increasing economic power.

(f) Organizations in the Industry

Early in the history of the milk industry there were voluntary associations to further special interests. Before World War I organizations representing the processing side—the Dairymen's Association of Eastern Ontario and the Dairymen's Association of Western Ontario—were well established. Ontario businessmen played a leading role in the formation of the Canadian Association of Ice Cream Manufacturers in 1917, and the organization of the National Dairy Council in the following year. The cheese sector was organized into local groups of factories or cheese boards for the purpose of selling their product at open auction. Cattle breeder associations sprang up around 1900. In 1920 the United Dairymen's Co-operative Limited was incorporated.

An early attempt to unite the milk producers in Ontario under a single organization should be noted. In 1922 the Ontario government incorporated, by Special Act, the Ontario Co-operative Dairy

Products Limited. This was to be a central agency, organized on a pool basis, through which Ontario milk producers could market their products. Despite the backing and promotion of the government, this attempt at concerted action failed because of lack of producer support.

In the fluid-milk field both distributors and producers gradually organized themselves on the basis of individual markets. By 1929 the distributors had joined together as the Ontario Milk Distributors' Association. The fluid-milk producers, meanwhile, had come together to form the Ontario Milk and Cream Producers' Association, which was gradually broadened to include representatives from all producer groups. The Association was terminated in 1932 and replaced by a number of organizations which appeared to be more suitable to those difficult times.

Faced with the adverse conditions of the early 1930's, dairy farmers came to clearer recognition of the merits of organizing and acting collectively. The fluid-milk producers led the way by forming the Ontario Whole Milk Producers' League in 1932. A year later cheese-milk producers were organized as the Ontario Cheese Factories Patrons' Association—later changed to the Ontario Cheese Producers' Association. In 1934 the Ontario Concentrated Milk Producers' Association was established, followed in 1936 by the Ontario Cream Producers' Association.

Subsequently, marketing schemes were approved by the cheese, cream, and concentrated-milk producers. The Ontario Cheese Producers' Marketing Board came into operation in 1934, the Ontario Cream Producers' Marketing Board in 1946, and the Ontario Concentrated Milk Producers' Marketing Board in 1954. These three marketing boards took over most of the functions of the producer associations. The original associations still remain but are practically dormant.

The Ontario Whole Milk Producers' League continues to be the primary organization representing fluid-milk producers. However, the League has changed in character from a loose federation of autonomous local associations to a strong central organization. The Ontario government has fostered this consolidation by removing the responsibility for price negotiations from the member locals. This duty has been assigned to the League and producer dues are paid directly to it. The introduction of formula pricing also contributed to the increased stature of the central body. Today the League operates in *some* respects as the provincial marketing board for fluid milk.

Until now the four producer organizations in Ontario have not managed to come together to form one over-all organization to

support their common interests. The nearest approach to such an over-all producer organization is The Milk Producers' Co-ordinating Board, established in 1954 by the Ontario government under the Milk Industry Act. It consists of appointed representatives from the four producer organizations. In the ten years since it was formed, the Co-ordinating Board has functioned primarily as a forum and meeting place, although it has very broad powers.

Before 1947, milk transporters in Ontario had no separate organization to represent their particular interests. In that year a Milk Transporters' Division was established as part of the Automotive Transport Association of Ontario. This sub-organization presently has a membership comprising more than half of the licensed milk truckers in Ontario.

On the processor side, the Ontario Concentrated Milk Manufacturers' Association was formed in 1948, and the Ontario Cheese Manufacturers' Association around 1950. Other processing interests have been organized for many years as the Ontario Milk Distributors' Association, already noted, the Ontario Association of Ice Cream Manufacturers, and the Ontario Creamerymen's Association. In 1954 these five major bodies came together to form the Ontario Dairy Processors' Council—an over-all trade organization representing the common interests of milk processors and distributors in Ontario.

(g) **Pricing**

For many years there have been four separate arrangements in Ontario for pricing raw milk, one for each of fluid milk, cheese milk, and milk for concentrated products, and cream for butter. These four separate pricing jurisdictions have been maintained despite an increasing interdependence and overlapping of the four traditional commodity sectors of the industry.

(i) **Fluid-Milk Pricing**

Since 1934 the Ontario government has regulated fluid-milk markets and supervised fluid-milk pricing. Up to 1947 fluid-milk prices, both at the producer and consumer levels, were directly administered by the Milk Control Board. In 1947 retail price control was abandoned, and collective bargaining was introduced, with the Board acting as arbitrator when producers and distributors failed to reach agreement. In 1954 a pricing formula developed by the government was superimposed upon the collective bargaining framework. This formula, which became a compulsory feature of all market agreements after 1957, provided for automatic adjustment in prices whenever the calculation published by the Dairy Commissioner showed a change of 19c per 100 pounds.

The formula has shown four price increases in its ten years of operation, and practically all markets have followed this price lead. Participation in price-making by producers and distributors has been limited to negotiating market differentials above or below the "fair price" indicated by the formula. In these negotiations the League acts on behalf of producers in all fluid-milk markets, while the Ontario Milk Distributors' Association has generally acted for the distributors. The Milk Industry Board, meanwhile, retains control over the general level of prices through its function of arbitrating price disputes, and its power to modify the formula. In 1961, and again in 1964, the Board, on the advice of the Formula Committee, adjusted the formula indexes and weights in an effort to keep fluid prices at a fair level and in a proper relationship with other raw-milk prices.

(ii) Pricing of Cheese Milk

In Ontario cheese produced in co-operative factories has been regarded as the property of the milk producers until the cheese is sold. To the extent that cheese is produced co-operatively the price realized for cheese milk depends primarily on the selling price for cheese.

Prior to World War II prices for cheese were established through competitive bidding at cheese auctions. Since much of the cheese was destined for export to Great Britain, the price paid by exporters inevitably established the over-all price level. During World War II and the post-war period, prices for cheese were controlled by the federal government in order to fulfil export commitments with the United Kingdom. Since 1951, the Ontario Cheese Producers' Marketing Board has effectively determined the prices for cheese.

Up to 1958 the Board protected its negotiated minimum price by entering the auctions and purchasing all first-grade cheese not sold to the regular buyers. This cheese was stored and cured, then resold either at home or for export. This was possible because of the financial support provided by the government of Ontario. If necessary, the Board could always dispose of this cheese to the federal government at the established floor price which was lower than the negotiated minimum price. In 1958 the Board's subsidiary, the Ontario Cheese Producers' Co-operative, was licensed directly as a buyer, and since that time its bids on the exchanges have more or less set the price for all other buyers. Because of buoyant markets, the federal government's offer-to-purchase price has not been of significance in recent years.

The Marketing Board operates a two-price system and pays a blend price to producers. Cheese for export to the United Kingdom is

purchased by the Co-operative at the domestic price, then sold at a reduced price to British importers. This operation is financed by means of a levy of 9/10c per pound on all cheddar cheese produced in Ontario.

(iii) Pricing of Milk for Concentrated Products

In the thirties and early forties, a formula system of pricing was in effect in the concentrated sector. This method was discontinued after federal price controls were introduced in December 1941. Since the War, prices of milk for concentrated products have been determined by collective bargaining. The Ontario Concentrated Milk Producers' Association, and latterly the Ontario Concentrated Milk Producers' Marketing Board, has bargained on behalf of the producers, while the Ontario Concentrated Milk Manufacturers' Association has acted for the processors. When negotiations have failed to result in agreement, the Milk Industry Board has acted as arbitrator and handed down a price award binding on both sides.

The purchase contracts negotiated or arbitrated in the concentrated milk sector set out a schedule of minimum prices effective across the entire province. Several different prices are established for the raw milk, related to the market value of the final products into which it is manufactured. There are also price differentials between the domestic and export markets. Since June 1963 there has been a price differential based on quality. Over the years the number of price categories has been gradually reduced to four.

(iv) Pricing of Cream for Butter

Since World War II the federal government's floor price under butter has effectively set the minimum price for farm-separated cream. Traditionally creameries paid producers the same price per pound of butterfat as they realized per pound of butter. This informal arrangement has been continued right up to the present through a gentleman's agreement between the Ontario Cream Producers' Marketing Board and the Ontario Creamerymen's Association. Since 1958 cream producers have received a minimum of 64c per pound for butterfat.

(v) Pricing of Transport Services

For many years milk truckers in Ontario carried on their business on an independent, individual basis. Each operator arranged with his own producers the rates and terms for his service. Beginning in the late 1930's, milk transport to a few cities, such as Toronto, Hamilton, and Guelph, was organized on a market basis, and uniform hauling rates were established. Market-wide organization of milk

truckling was later achieved in other centres such as Ottawa, London, and Windsor. In 1948, the Milk Control Act first provided for collective bargaining between truckers and producers to determine transport charges in fluid-milk markets. In actual practice, however, only a few of the largest markets have formally used collective bargaining and filed transport agreements with the Milk Industry Board. In the great majority of fluid-milk markets and for almost all manufacturing outlets, milk transport rates continue to be a matter of individual contract, often verbal, between the truckers and the producers they serve.

(h) Governments

A vital feature of the Ontario milk industry at the present time is the important role played by the provincial and federal governments. Major involvement and participation by the Ontario government dates back to 1934. Prior to that time, the Province had restricted its activities to giving instruction in cheese- and butter-making, and to providing quite limited educational and research services to dairy farmers. The Canadian government became an important influence in the milk industry at the beginning of World War II. Previously its role had been limited to establishing standards for dairy products, and to encouraging the industry through technical assistance and grants to cheese factories and creameries.

(i) Ontario Government

With depressed economic conditions in the 1930's came disruption and chaos for Ontario's milk industry. Consumption declined, foreign markets were greatly reduced, and prices fell drastically. Milk which had customarily gone into manufactured products was soon being offered to the fluid trade. In a short time the informal agreements between producers and distributors in fluid-milk markets were undermined and abandoned. The entry of many new distributors added another element of instability. Destructive price-cutting was rife; the retail price of fluid milk dropped as low as to 5c a quart. Returns to producers were lowered drastically. Bankruptcy among distributors was commonplace, leaving producers without markets and with little assurance of being paid. The situation progressively deteriorated through 1932 and 1933, and the difficulties and general despair were almost beyond description. Faced with these conditions, the Ontario government enacted the Milk Control Act of 1934 in an attempt to restore order and stability to the industry. This emergency legislation established a Milk Control Board with wide powers to administer, control, and supervise fluid-milk marketing. The Board was granted authority to regulate consumer and producer prices, inspect and audit distributor records, engage in restrictive licensing, and pass any regulations necessary to restore stability.

to the market and to ensure fair business practices. In applying these broad powers the first and succeeding boards concerned themselves chiefly with licensing and bonding distributors and concentrated milk manufacturers, and with improving prices to producers.

In the following years the Ontario government steadily expanded and consolidated its influence in the milk industry. Quality and health aspects of milk were brought under provincial jurisdiction. In 1936 regulations were added to the Milk Control Act providing for inspection and approval of pasteurizing plants by the Department of Health. In 1938 the Public Health Act was amended to require compulsory pasteurization. In the same year, regulations under the Farm Products Grades and Sales Act came into force. This Act, which duplicated existing federal legislation, set up standards for grading, inspection, packaging, handling, and advertising of dairy products. Federal inspectors were authorized to enforce these standards in Ontario. Also in 1938 a revision of the Dairy Products Act, originally passed in 1909, included licensing of creameries and cheese factories, elimination of cream receiving stations, inspection of dairy farms, and the power to prohibit the sale of milk and cream produced under unsanitary conditions.

These are typical of the bases upon which the Ontario government has established wide jurisdiction over the quality of all milk and milk products, and the sanitation of all processing facilities. Today, the Dairy Branch of the Department of Agriculture is responsible for quality inspection and enforcement at the farm and in transit. The Department of Health is responsible for inspection of plants and final products.

Ontario has passed legislation to control the manufacture and sale of margarine and other edible oil products that compete with dairy products. Administration and enforcement of the Oleomargarine Act and the Edible Oil Products Act are part of the duties of the Dairy Branch.

Milk transportation came under government supervision with the enactment of the Public Commercial Vehicles Act of 1927. This statute, with its successive amendments, provides for compulsory licensing and insurance of all commercial vehicles, including those engaged in the hauling of raw milk and cream. This provision does not apply to some co-operatives. Under P.C.V. regulations, an applicant for a Class E milk-hauling licence must specify the route that he proposes to serve and must persuade the Transport Board that public need and convenience justify his intended service. In 1963 some 700 operators held P.C.V. licences covering over 1,100 vehicles engaged exclusively in the commercial trucking of milk and cream in Ontario. Transporters are also subject to regulation

under the Milk Industry Act, wherein the types of equipment to be used are specified and other provisions ensure prompt and safe handling of milk between farm and plant.

Milk may be transported without a P.C.V. licence by co-operatives established under Part V of The Corporations Act if a certificate is issued under Section 18 of the Milk Industry Act. This section requires that more than three-quarters of the shareholders or members of the co-operative be milk producers supplying milk to one or more plants in a municipality.

Regulation of milk marketing by the Ontario government has become increasingly complex and detailed over the years. Controls have been extended to cover days of delivery, classification of products, and distribution areas. There have been three major revisions of the original 1934 control legislation, in 1947-48, 1954, and 1957.

The 1947-48 amendments provided for collective bargaining between producers and distributors to establish minimum prices for raw milk, and between producers and transporters to establish hauling rates for milk. Other important changes in 1947-48 were the removal of control over retail milk prices and the exemption of transport co-operatives from P.C.V. licensing requirements. These changes followed recommendations contained in the 1947 report of the Ontario Royal Commission on Milk.

In 1954 the various Acts respecting the milk industry in Ontario were consolidated under new legislation—the Milk Industry Act. Two boards were established to administer the new Act. The Milk Control Board continued as the regulatory agency for fluid milk, while a Milk Products Board was set up to regulate the marketing of milk products. The Concentrated Milk Producers' Marketing Board, the Cheese Producers' Marketing Board, and the Cream Producers' Marketing Board were designated as local boards under the Milk Products Board, whereas formerly they had been under the jurisdiction of the Farm Products Marketing Act. The Milk Industry Act of 1954 also initiated the Milk Producers' Co-ordinating Board, the Milk Industry Commission, and the office of Dairy Commissioner. The Dairy Commissioner was given the duty of supervising and co-ordinating the administration and enforcement of the new Act.

In 1957 the 1954 Act was repealed. New legislation created the Milk Industry Board, which took over the functions of the two previous boards and became the single authority over the marketing of all milk and milk products in Ontario. It has consisted, usually, of three members, one representing the producers, another the manufacturers and distributors, and an independent chairman. Enforcement of the 1957 Act continued to be the responsibility of the Dairy

Commissioner. In 1957 two important changes were made in the Regulations under the Act. A Formula Committee was set up to study and advise on the operation of the fluid-milk formula, and the Whole Milk Producers' League was recognized as the official bargaining agency for all fluid-milk producers in Ontario. One recent amendment to the Act is also noteworthy. In 1961 provision was made for the four producer groups to unite under a single marketing plan, if they so desired.

The Ontario government has carried out its policies and activities in the milk industry chiefly through the Dairy Branch of the Department of Agriculture. Thirty years ago the Dairy Branch employed about forty people, most of them instructors in cheese- and butter-making. Today, the Dairy Branch staff has expanded to nearly 100 persons who perform a wide range of tasks including test checking, inspection, auditing, instruction, extension, promotion, and co-ordination.

(ii) Canadian Government

Before World War II the Canadian government was not a major factor in the Ontario milk industry. The principal federal dairy legislation prior to the War consisted of the Milk Test Act, 1910, the Dairy Industry Act, 1927 (now the Canada Dairy Products Act), the Agricultural Products Co-operative Marketing Act, 1939, and the Cheese and Cheese Factory Improvement Act, 1939. This last Act provided grants for the consolidation and modernization of cheese factories, and bonuses for high-scoring cheese. The Co-operative Marketing Act provided for guaranteed loans to producer co-operatives engaged in marketing. The Dairy Industry Act and its successor established national grades and standards for dairy products and regulated interprovincial and international trade. The Milk Test Act covered the checking and marking of glassware and equipment used in Babcock tests. In addition, the Natural Products Marketing Act was passed in 1934 to facilitate the marketing of farm products, including dairy products, by farmers themselves. However, this Act was declared ultra vires in 1936, and thereafter marketing legislation was left primarily to the provinces.

With the onset of war, the Canadian government assumed wide powers of control and direction over the entire Canadian economy. The wartime policy in respect of the milk industry was essentially twofold: first, to prevent inflationary price increases in the face of heavy demand for essential foods such as milk, butter, and cheese, and second, to expand production in order to meet overseas commitments. A variety of control measures including price ceilings, price supports, subsidies, rationing, prohibitions, and requisition of supplies were introduced to achieve these objectives.

In 1944 the Canadian government passed the Agricultural Prices Support Act. This Act created the Agricultural Prices Support Board whose purpose was to stabilize and maintain prices of farm products in order to permit an orderly transition from wartime to peacetime conditions. The Board became operative in 1946 when de-control was begun. Butter, cheese, and skimmed-milk powder were among the products designated for price support, which was accomplished by direct purchases of these commodities, or by deficiency payments to producers.

In 1958 the Agricultural Stabilization Act was passed. This Act created a Stabilization Board which replaced the Support Board as the main instrument of federal dairy policy. Like its predecessor, the Stabilization Board aims to protect and improve the economic position of producers by promoting orderly marketing and ensuring "fair prices". The Board also controls imports of dairy products into Canada and subsidizes exports.

In the last two years federal dairy policy has shifted perceptibly in the direction of reduced subsidies and less comprehensive price support. The export subsidy on skim powder has been withdrawn and that on cheddar cheese reduced. The across-the-board subsidy on manufacturing milk has been discontinued, and the Board now offers supports on a selective basis.

Other federal actions of importance to the Ontario milk industry since World War II include the legalization of margarine, the enactment of the Agricultural Products Marketing Act in 1949, and the revision of the Food and Drug Act in 1954. Division 8 of the Food and Drug Regulations sets out standards and tolerances relating to the composition of milk and milk products. The Agricultural Products Marketing Act extended the authority of provincial marketing boards such as the Ontario Cheese Producers' Marketing Board to cover interprovincial and export trade.

(iii) Municipal Governments

At the present time governments at the municipal level have only a minor impact on the Ontario milk industry. Years ago the quality of fluid milk and cream, sanitation of distributing plants, and inspection of farms all came under municipal jurisdiction. Gradually these responsibilities were assumed by the provincial government. Revisions to the Milk Act in 1964 removed the last remnants of municipal authority in respect to fluid-milk quality. Today municipal action is largely confined to licensing milk vendors and regulating commercial practices such as hours of delivery and closing times. Several small municipalities, however, have passed by-laws which attempt to preserve their local market for local dairies by stipulating

conditions that must be met before milk may be sold in the municipality by any outside competitors. In several northern Ontario communities there are pressures to enact similar restrictive by-laws against concentrated liquid milk from southern Ontario. In general, however, Ontario municipalities no longer have a significant influence upon the broad pattern of milk distribution in the province.

The general problems facing the milk industry in Ontario were the subject of comment by Professor H. S. Gordon, Carleton University, in his assessment, dated July 1961, of the proposals contained in the Carncross, MacFarlane and Wood Report:

"The problems of the milk industry, it seems to me, are no different than those facing any other industry in a world of economic progress and change. We have had over the past fifteen years or so highly significant improvements in the technological possibilities of milk production, transportation, manufacture, and marketing. These technological possibilities, to be fully realized, require important changes in virtually all aspects of the industry. They require that farm operations should be larger in scale and, correspondingly, that farm enterprises and farmers should be fewer in number; they require that milk manufacturing and distributing plants should be fewer and larger; they require that restrictions placed on the transportation of milk by the legal definition of marketing and distribution areas should be broken down or at least enlarged sufficiently so that efficient use can be made of modern transportation methods; they require that the marketing of fluid milk should relate itself to and make use of the very important innovations in food marketing generally that have taken place in recent years; they require that it should be recognized that consumer wants for milk and milk products are not static but changing and that the milk production and distribution industries must accommodate themselves to these changes. In my view, most of the difficult problems of the milk industry are due to efforts to resist and hamper the processes of progress and change.

"In the producing end of the industry, for example, we have many large farms with large herds of fine cows, modern buildings and equipment, and operators who are highly skilled in the care and handling of animals and milk; and at the same time we have the one-man farm with ten or a dozen cows, ramshackle barns, and poor equipment. If the one is an efficient way to produce milk at low cost, is it any wonder that the other method will yield only the most meagre income to the producer? Would we expect the cottage weaving industry to be able to exist in the same economy as the modern automated textile mill?

"But, under circumstances such as these, the producer invariably encounters a temptation to misread the essence of the situation. Instead of concluding that he must either acquire more skill and invest more capital to enlarge and modernize his operations, or else get out of the industry, he is tempted to reason that if only his price were higher, he would have no problems. This is, of course, a superficial appreciation of the situation at best. It does nothing to penetrate through to the real problems of the industry and a policy based on such a view can do little more than postpone the difficulties, and it usually would tend to increase them. There are some industries in which such views have, unfortunately, dominated both producer thinking and government policy, and the milk industry is one of them. For the past thirty years we have been attempting to solve the problems of the milk producer by manipulating prices and markets on the basis of short run and superficial approaches to his problems. We now find ourself with a complicated marketing and pricing system, which contains many potent inequities and perpetuates waste and inefficiency."

SECTION 2

EFFORTS TO COPE WITH ACCUMULATING PROBLEMS

- (a) Principal Problem Areas
- (b) Attempts and Failure to Establish an Over-all Marketing Plan

Since the end of World War II, and the Report of the Ontario Royal Commission on Milk published in 1947, the milk industry in this province has faced a substantial variety of pressures and problems. These difficulties are usually identified in isolation, but to gain understanding of their full effect they must be related one to another. Although some of them had their origin during the 1930's, most have come into being as a result of developments during the last fifteen years.

For the most part the problems that currently beset the Ontario milk industry can be said to be internal and provincial in character. They have arisen out of the institutions, attitudes, and arrangements peculiar to Ontario. While similar difficulties can be identified in other jurisdictions, most of the necessary remedial actions can be undertaken within this province, and, with some important exceptions, do not depend on co-operation with these other jurisdictions. In spite of this capacity to act effectively, the well-intentioned and unselfish efforts made by many persons during recent years have failed. The milk industry in Ontario has not solved its major problems, nor has it been able to cope with many changing circumstances.

At the same time, there have been several important developments originating outside the province which are not subject to the control of local authorities. These have added to the difficulties originating within the province, and influence the remedies that must be accepted by the industry. Four of these events should be noted:

- (i) The legalization of margarine in 1952 and its subsequent popularity brought disruption and uncertainty to the industry, resulting in a significant reduction in the per capita consumption of butter, with an unfortunate psy-

chological effect on the attitude and optimism of many people in the dairy industry.

- (ii) The decline in Canada's position as a dairy exporter after World War II has forced the industry to put increased reliance on the domestic market.
- (iii) The deep concern over the possible undesirable effects of uninhibited consumption of animal fats, which started in the United States after 1950, spread to Canada. The result was the almost total disappearance of the demand for milk having high fat content, and a significant reduction in the consumption of standard milk. Consumers changed to milk with 2 per cent fat and to skim-milk, and consumed less butter.
- (iv) Many nations have extended their production of milk to the point where significant surpluses are available for world distribution, and most of them have encouraged exports by subsidy and other support arrangements.

Milk producers in Ontario, through their representatives, have recognized most, if not all, of the unfavourable factors affecting the industry in recent years. They have come to the general conclusion that present marketing arrangements are inappropriate in the circumstances. There have been serious efforts to make new arrangements centring in an over-all marketing plan, but without significant progress. Failure is explained in large measure by the existence of four distinct groups of milk producers having somewhat divergent interests. There have been no legal barriers to joint action for many years, and government has provided a climate of encouragement.

This section has two objectives: first, to set down the principal manifestations of difficulty, describing each briefly, and second, to trace the general history of the many unsuccessful attempts to establish marketing arrangements appropriate to present circumstances.

(a) Principal Problem Areas

Our study of the milk industry has established many important causes of present problems, and it is clear that each must be faced and solved if there is to be the greatest possible measure of success in the industry during the years that lie just ahead. We wish to identify many of these problem areas and make brief comment upon them; each is the subject of much more extensive discussion elsewhere in this Report. At first glance, it may appear that the majority of these causes of difficulty are related to producers. Most, in fact, have much more widespread implications.

(i) Varied prices for milk for fluid and other uses

Proceeds from the sale of raw milk are not shared equally by those who produce it. The primary explanation of this fact lies in the protective legislation which since 1934 has been accorded to those who have provided milk for the fluid market. For many years, only a few producers have been able to establish a place in the fluid-milk market.

The price negotiated for fluid milk has been much higher than that paid for milk for other end uses. However, the fluid-milk shipper has not been as well rewarded as might seem at first glance. Usually he has received the negotiated fluid-milk price for only a part of his production, because the remainder has been used for other purposes and paid for at lower prices. This has not always been understood, particularly by non-fluid-milk shippers, and much unhappiness and envy have been generated. At the same time, there has been a widening of the spread between the nominal or negotiated price for fluid milk and prices paid for milk going into manufacturing.

A related source of dissatisfaction has to do with the very great difficulties experienced by nearly all producers who attempt to secure a place in the fluid-milk market. Restricted entry has been established in varied forms under market agreements negotiated between distributors and producers. Generally speaking, producers established in a market have been able to grow with it and other producers have been unable to gain entry.

All of this discontent has been accentuated by the decreasing difference in both the quality of milk produced and the premises maintained by fluid-milk shippers and many non-fluid-milk shippers. In general terms, during recent years milk producers without a quota have had little hope of getting into the fluid-milk market, no matter how fine the quality of their product, and no matter how willing they might be to invest money in necessary facilities.

Non-fluid-milk producers resent what they consider to be the privileged position of quota holders, and protest ever more vigorously the closed shop position of fluid-milk shippers. The Concentrated Milk Producers' Marketing Board, on behalf of its membership, has made repeated demands for the opportunity to share in what they consider to be the lucrative bottled trade. Similarly, the Cheese Producers' Marketing Board has expressed its view:

"Whereas at one time the quota system for Whole Milk Producers may have been necessary to obtain sufficient milk supplies during low production periods, we are certain there are now

enough shippers from the other groups with high quality milk to maintain a continuity of supply for the fluid trade during the whole year."

This statement, dated October 31, 1962, went on to request "that the provincial government rescind the legislation which protects whole-milk shippers and gives them an unfair advantage over the other milk producers in the province."

There is no doubt that most milk producers of this province who do not share in the fluid-milk market believe that they are receiving an inequitable share of the proceeds derived from the sale of milk in this province.

(ii) Varied Financial Returns to Fluid-Milk Producers within a Market

Within individual fluid-milk markets producers do not receive identical treatment. This is because each individual producer is tied to a specific distributor. The producer's income depends in large measure upon the success or failure of that distributor, because the percentage of milk shipped by a producer which is paid for at the top fluid-milk price depends upon the volume of fluid-milk sales achieved by the distributor. A reduction in the distributor's sales volume results in a reduction in the percentage of quota to be paid for at top price. On the other hand, a producer who ships to a distributor with an expanding business is likely to receive top price for most or all of his milk, and an increase in quota from time to time.

The position was summed up for us by Mr. A. Lishman, who appeared before the Committee on July 30, 1963, and said:

"If you are fortunate enough to ship to a dairy that is increasing in business and going ahead, you can probably get a higher base or quota without any effort on your part. On the other hand, if you are shipping to a dairy that is going downhill, the situation is reversed and there is nothing you can do about it."

Financial returns to fluid producers vary for another reason. So-called "excess milk", that is, milk received in excess of dairy requirements, is usually sold at a relatively low price. There is wide variation in the surplus milk position of dairies, and these differences are reflected in the net return to producers.

(iii) Quotas

Many producers associate higher prices and greater net return from the sale of their product with the possession of a fluid-milk "quota", or right to supply the fluid-milk market. As a result, many of them have spent substantial sums of money to acquire such

quotas, in spite of the fact that they cannot be the subject of a binding sales contract. Quotas have been valued, presumably, on a basis of the present value of the estimated future extra benefits likely to be achieved during the period that the quota operates. Whether these estimates have been realistic or not, quotas have undoubtedly added to the cost of the production of milk for those who acquire them, in that the capital cost and resulting interest must be recovered from the sales of milk.

The Channel Islands producers have been able to avoid most, if not all, of the difficulties associated with quotas, because many distributors have been willing to accept unlimited quantities of Channel Islands milk. Others have granted the Channel Islands producers preference in establishing quotas, and in general have treated them generously. All of this has led to suspicion, envy, and doubt among the producers milking other breeds of cows.

Quotas are, in theory, administered by a local Quota Committee in each market. In many areas this arrangement appears to have broken down. Some distributors have, without reference to the Quota Committee, established quotas that appeared to them to be appropriate. In small markets, one or two producers have been required to make decisions that are of very great importance to the economic welfare of fellow-producers and neighbours.

Quotas have been established, typically, by reference to the quantity of milk shipped by producers during selected months of low production during the preceding year. For various reasons, a producer usually feels inclined to ship more than the quota already established. We have been told that this has led to arrangements such as the borrowing or buying of milk from neighbouring producers, or the borrowing of cows during the quota-establishing period.

(iv) Rigid and Unrealistic Pricing

Pricing arrangements in the Ontario milk industry have sometimes been unrealistic and inappropriate.

The 3½c price differential for milk-fat in fluid milk was effective for many years to May 1, 1962, and is an apt example of rigidity. This differential became unrealistic when the price for milk-fat rose to more than about 40c per pound in 1947. One of the results of this arrangement was an important distributor preference for Channel Islands milk. For several years distributors were prepared to buy Channel Islands milk in the certain knowledge that the milk-fat could be sold for more than it cost, or used to advantage in other products.

Since 1957, the price for fluid milk has been related to a price formula established under Regulations made under the Milk Industry Act. This arrangement has eliminated much discussion of pricing, and many negotiations, but has resulted in unfortunate rigidity and market prices somewhat unresponsive to changing circumstances.

During recent years widely varying prices have been paid for milk for some products because such milk does not fall within the bargaining jurisdiction of a single producer group. For example, fluid-milk distributors have been able to purchase milk for cottage cheese and ice cream at a lower price than other manufacturers of these products who bargain with producers supplying the manufacturing market.

Substantial quantities of milk in excess of dairy requirements are received by fluid-milk distributors. Under the terms of the typical contract with the distributor, the producer is free to direct the flow of milk in excess of his quota in any way that appears appropriate to his interests. However, in practice—and this is increasingly true with the adoption of bulk handling—the producer cannot split his shipment. The result is that he must assign responsibility for the sale of the so-called "excess" milk to the distributor, and assume any costs involved in its redirection. Very often this excess milk, identical in quality with that going into the fluid-milk market, brings the producer much less than he would receive had it gone to a manufacturing plant.

The present provision for a very substantial number of marketing areas and marketing agreements for fluid milk can result in strange and unexplained differences in price in neighbouring communities. As a result, producers on adjacent farms are sometimes paid different prices for milk of equal quality destined for precisely the same end use in different markets. It may also result in producers remote from their market receiving a greater net return for their milk than neighbours supplying a local distributor.

Similarly, the price of milk at the retail level varies in adjacent markets. These variations reflect differing operating conditions and costs, differing selling arrangements and prices at wholesale and retail levels, and the effect of the many small semi-monopolies that prevail in distribution areas now provided for under the Act.

(v) Breakdown of Distribution Areas

Erosion of the distribution areas established under the Milk Industry Act has been an important characteristic of the milk industry in Ontario during recent years. These areas are, for the most part, highly artificial; they permit the price differences just noted and tend to protect the inefficient.

Distribution areas have prevented many distributors with superior operating efficiency from extending their activities to neighbouring markets where they could compete effectively. As a result these distributors have not made some capital investments which they might otherwise have been willing to undertake in order to achieve even greater efficiency.

In the past, the intention of the law has been respected for the most part. There is now clear evidence that competitive pressures, technological changes, unused capacity, and the profits that seem to be possible through expansion of markets have led many distributors to discover ways of circumventing present regulations. It is not difficult to avoid present restrictions. The Act and Regulations do not prevent owners of milk from moving their product from one part of the province to another. Through subsidiary companies, by using public transport vehicles, or by selling milk at the plant door for carriage by the purchaser, it is easy to break through the unnatural barriers between distribution areas. At the present time there is no doubt that distribution areas are under serious attack and that efforts to destroy them will continue and grow in importance.

(vi) The Milk Industry Act and The Milk Industry Board

In our opinion, the Act and related Regulations contain many loop-holes and uncertainties, and fail to recognize growing competitive pressures and other changes taking place in the industry. We have already drawn attention to some of the problems associated with marketing and distribution areas, varying prices, and quotas.

In recent years processors and others have tended to adopt a legalistic approach to negotiations. In their dealings with the Milk Industry Board they have shown growing reluctance to co-operate in making the established legislation workable. The result has been an unfortunate lack of cohesion and good faith, a progressive deterioration of relationships within the industry, and a general lack of respect for the present law.

The Milk Industry Board is charged with the interpretation and enforcement of the Milk Industry Act and Regulations. The Board has wide powers and important responsibilities. Many of those who appeared before this Committee expressed the opinion that the Board has been uncertain and ineffective in recent years. It was their opinion that the Board has not acted with the confidence and vigor necessary to maintain order in the industry, and that it has not used its authority to curb many abuses and to penalize offenders. These were strong statements presented publicly.

(vii) Producer Leadership

The quality of leadership provided by producers as individuals, and through their organizations, has been seriously questioned. No one has suggested that all have been found wanting, but thoughtful people have stated that many producer leaders have failed to recognize their full responsibility. The most important example is the prolonged effort to bring the present four producer organizations into one strong, significant body. We were told, for example, by Mr. George Lowry, a director of the Ontario Concentrated Milk Producers' Association, at a public hearing: "We are four different groups pulling in four different directions."

There can be no doubt that some of the producer leaders, including a number in key positions, have failed to recognize and respond to the evident need for joint action. They have not accepted the inevitability of increased interdependence between the four groups but rather have sought to perpetuate their separate organizations.

(viii) Multiple-product Plants

Another important cause of difficulty in the industry flows out of relatively recent integration of activities into multiple-product plants. Thirty years ago most plants—creameries, cheese factories, and dairies—were concerned with a very limited range of closely linked products and operated more or less in isolation from each other.

The four producer groups have failed to adequately recognize the establishment of multiple-product plants, the growing interdependence of products, and the consolidation that has occurred in the industry. Their jurisdictions, as originally defined, have become blurred, and overlap. More specifically, producers have been either unable or unwilling to see that the continuation of the four established and autonomous producer organizations is unsound.

(ix) Lack of Communication

A characteristic of the milk industry appears to us to be lack of effective communication. This is no doubt a cause of uncertainty and dissatisfaction. Examples can be found quite easily: within producer organizations and between them; between The Milk Industry Board and the various segments of the industry; between the Provinces of Ontario and Quebec. Without understanding based on a clear statement of objectives, recognition of problems, public discussion of significant developments, and sharing of views and experience, there cannot be effective co-ordination within the industry.

(x) Unused Capacity

There is much unused capacity in almost every segment of the dairy industry in Ontario, and even greater capacity can be achieved with relatively little investment or effort.

The milk production of individual cows has increased greatly during recent years. There is no doubt that better breeding and feeding, coupled with effective assessment of the production of individual animals and followed by appropriate culling, would result in greatly increased production within a short time.

Most processing and manufacturing plants contain equipment that is used infrequently, and most operate for a limited number of hours per day and week. The greatest volume of unused capacity appears to be in the relatively few large new establishments.

Much of this unused capacity has come into being as the result of past arrangements within the industry which we have already identified as artificial and insupportable, specifically, those relating to multiplicity of marketing and distribution areas. Much more exists because of failure to establish a rational pattern of behaviour in transportation and distribution. Modification of past arrangements in order to secure an efficient modern milk industry will quickly display the magnitude of the present unused capacity.

(xi) Quality and Sanitation

Until very recently there has been surprisingly slow progress in improvement of the quality of milk and standards of sanitation in the industry. There have been many reasons for this over the years, including lack of determination and effort by processing segments of the industry, friction between municipalities and the Departments of Health and Agriculture over the responsibility for milk quality, and some reluctance on the part of the Ontario government to squarely face the problems related to poor-quality milk and the cost and other difficulties to be faced in its elimination.

We are convinced that there has been—and indeed is—great variety in the quality of raw milk that comes into the market in this province. There have been—and are, in decreasing measure—unfortunate consequences. Milk of the best quality is very often mixed with that having inferior characteristics. Producers with milk that is not acceptable at one plant because of its inferior quality attempt to peddle it—very often with success—at another establishment. Many producers have been unwilling to recognize the improvement in quality that can be achieved quickly and inexpensively by better sanitary practices.

We are satisfied that most of these past difficulties have been overcome. It is clear that much has happened recently, that important plans have been made, and that support will be provided for the energetic efforts which, within a very short time, will result in a single high quality of milk in this province.

(xii) The Dairy Branch

The Dairy Branch of the Department of Agriculture has been frequently, if not chronically, understaffed. During the last five or six years the Branch has been expected to handle a very greatly increased range of responsibilities as the result of changes in the law and regulations, increased complexity of the industry, and higher standards of sanitation and quality. Indeed, all of the frictions and difficulties to which this section of our Report is devoted help to explain the way in which the task has grown. The result is that many responsibilities have been inadequately fulfilled, and at the same time many members of the staff have been overworked. In these circumstances, the relationships between the Branch and other segments of the industry have been less satisfactory than they might well have been.

(xiii) Governments

The Government of Canada has taken an active part in the milk industry through the establishment of support prices and subsidies, coupled with control over the importation of milk products. The principal criticism of such participation has been the uncertainty that exists while awaiting the annual policy statements of the Minister of Agriculture. As a result, those in the industry are unable to make long-term plans with confidence.

The Provinces of Ontario and Quebec have many joint concerns and conflicting interests in the milk business. Through the years there has been something less than the degree of co-operation and co-ordination that would appear to be necessary in order to achieve best possible results for each province.

(b) Attempts and Failure to Establish an Over-all Marketing Plan

For more than ten years the milk producers of Ontario have been aware of most of the problems to which attention has been directed in the preceding subsection. Most farmers have been convinced that milk prices have been too low to provide a satisfactory net income. Many have recognized the significant differences in price paid for milk of similar quality, the barriers resulting from the quota system, and the existence of "excess" supplies of milk and

surpluses of many milk products. Few have achieved a broad understanding of the entire situation.

Each of the four producer groups has voiced concern, recognized the inevitability of change, and made efforts to improve conditions in the industry. The point of view and objectives of the four groups have varied considerably. The Ontario Whole Milk Producers' League, acting for fluid-milk shippers, has been inclined to preserve present arrangements, which provide a favoured position in the market for them. The Ontario Concentrated Milk Producers' Marketing Board has pressed most vigorously for a place in the fluid-milk market for its members, a better price for their high-quality milk, and control over "surplus" supplies. The Ontario Cream Producers' Marketing Board has been mainly concerned with the maintenance of—or increase in—butter prices, while working for full participation in any new marketing plan. The Ontario Cheese Producers' Marketing Board has devoted its energies to the marketing of cheddar cheese, particularly in the United Kingdom.

There have been several major efforts to cope with these accumulating problems, and to strengthen the industry during recent years. These efforts have tended to centre on what is generally referred to as "an over-all milk marketing plan". Each producer organization has had a part in the struggle to come to conclusions, and to launch such a scheme. There have been many proposals, much discussion, many hopeful tentative agreements; but in the end little or nothing has been achieved.

The purpose of this subsection is to outline briefly the nature of the efforts that have been made, and the pattern of development that led to the establishment of this Committee.

In 1952 the Toronto Milk Producers' Association attempted to launch an ambitious plan for the Toronto Market. This scheme failed to achieve adequate support from the producers.

The Ontario Milk Producers' Co-ordinating Board was set up in 1954 in recognition of emerging problems and in an effort to bring the producer groups closer together to work on a province-wide basis. A plan, which promised to bring some equalization of prices, was drawn up and agreed to in principle in 1955. Extensive announcement of agreement was made and an effective date proclaimed. However, difficult administrative and legal problems emerged, and the programme was abandoned before it came into existence.

The search for a workable arrangement continued. In 1958 a Milk Marketing Committee representing fluid-milk and concentrated-milk shippers was established with the intention of developing a plan to which the other two groups might be added later. The cream

and cheese producers displayed their interest in this undertaking, and all four bodies came together again. In 1959 extensive studies of marketing plans in Great Britain, the Netherlands, Denmark, British Columbia, and the Minneapolis-Saint Paul area were undertaken. The resulting observations were published by the Co-ordinating Board in March 1960. A comprehensive proposal, which included price blending among all Grade A shippers and the extension of shipping allocations, was prepared for approval by the four groups. Three of them accepted the committee's recommendations, but the executive of the Ontario Whole Milk Producers' League did not.

Subsequently, in July 1960, an extensive study of the Ontario milk industry was commissioned by the Milk Marketing Committee. In February 1961, the Carncross, MacFarlane and Wood Report was published. Out of this emerged a new set of proposals which included a complex equalization fund and the freezing of fluid-milk quotas. The proposal was sent on to the four producer groups, but again the Ontario Whole Milk Producers' League failed to concur.

At this point, the industry broke into two groups. The three manufacturing-milk groups came together in search of a marketing plan for manufacturing milk. The League determined to secure the full status of a marketing board. Numerous meetings, and the circulation of petitions by all four groups followed. The Minister of Agriculture, the Honourable W. A. Goodfellow, brought an end to all of this in September 1961 with a clear declaration that the government would not permit two marketing boards to be established along these lines.

The next step was a new effort by the four groups to devise a workable over-all plan. After much skirmishing a new proposal was submitted to a joint meeting in October 1961. There was agreement on many matters, but the old question of existing quota rights and their extension could not be resolved.

In spite of these many failures, but after further delays and much unproductive discussion, a new effort evolved in the form of the Provisional Milk Marketing Board which held its first meeting early in 1962. This board included representatives from each of the four major producer groups, and a spokesman for the Channel Islands breeds. After many meetings and long discussion this board also ceased to function. Its last meeting appears to have been held in September 1962. Failure has been attributed by first-hand observers to important personality conflicts, and the determination of each producer organization to continue in being.

The Ontario Whole Milk Producers' League and the Ontario Concentrated Milk Producers' Marketing Board continued their

search for a plan to cover at least these two groups. The draft proposals accepted were superficial and failed to reflect a depth of understanding that might have been the basis for final agreement. In the end, in April 1963, the Minister of Agriculture was asked to appoint a committee of inquiry to study all phases of the milk industry in Ontario.

Processors and manufacturers have been apprehensive of the powers and prerogatives the producers hoped to secure for their over-all marketing board. Many of the non-producer organizations and their spokesmen have come to conclude that the producers expect to achieve total control of the milk industry in Ontario. They fear that a producer-controlled Board would have power not only to market milk, but to direct it into any channels that appeared to be appropriate, to make contracts with existing processors and manufacturers, and to acquire transport, processing, and distribution facilities. In short, they are concerned that such a board would control the ultimate disposition of all milk and milk products. Misgivings and opposition were well summed up by the Ontario Concentrated Milk Manufacturers' Association: "The producer has been acting and no doubt thinking that the only solution is a producer-developed, producer-controlled and producer-operated plan solely for the benefit of the producer."

It is evident that past attempts to achieve an over-all marketing plan have come to nothing because producers could not compromise in their demands and in modification of their vested interests. Also, failure reflects the tenacity with which institutions cling to life, the problems met in reconciling the views of long-established institutions having divergent objectives, lack of understanding of the considerable complexity inherent in the manufacturing and marketing of milk products, and the need for extreme skill and patience if diverse personalities are to work together in harmony.

Perhaps we can best conclude this section of our Report and introduce our major recommendations by quoting a statement made to us on behalf of the Ontario Federation of Agriculture:

"The O.F.A. believes that, where the best efforts of producers have failed, governments at both provincial and national levels have a responsibility to prevent collapse of the dairy industry. It believes the time is now ripe for the Ontario Government to act decisively in this matter by creating at the earliest possible date a marketing plan which at least will bring a degree of order to the industry, even if the provision of final solutions to all aspects of the dairy problem is out of reach at this time."

Similar statements were made to us by many prominent producers; some of these statements are reproduced in Part D, Section 6, Exhibit IX.

PART B

PRINCIPAL CONCLUSIONS AND RECOMMENDATIONS

These proposals reflect the best experience of the milk industry in many other jurisdictions where dairying is being successfully carried on. They were formulated after much serious study of present arrangements and plans for the future in the United Kingdom, Ohio, Michigan, Minnesota, Quebec, British Columbia, and elsewhere. We were permitted to review costly experiments that have been conducted for many years. It was always necessary to recognize that conditions in Ontario are different from those to be found anywhere else. We have adopted some arrangements and concepts that seemed appropriate to local needs, modified others to advantage, and devised many of our own. We believe that our recommendations are suitable to present circumstances in this province, and that they will be flexible enough to adapt to probable future developments.

It was necessary for us to visualize the milk industry in this province as we thought it ought to come to be, tempered by present facts. Only in this way could we choose between alternatives in a rational fashion. Our principal guides to the future were the basic trends now identifiable: fewer and larger well-managed farms; fewer and larger multi-product processing and manufacturing plants; extension of bulk handling and more efficient organization of transportation; changing patterns of distribution and stronger competitive pressures; increased capital investment at all levels; rising productivity of industry resources.

Our observations led us to conclude that present conditions in the milk industry in Ontario represent an important opportunity for very great advances. There have been significant developments in other jurisdictions which have not yet been accepted here; there are pending changes elsewhere that we can adopt at once. We have a unique opportunity to move from well behind to well out in front, and this largely by recognition and acceptance of the experiments and conclusions of others.

Here are five important examples of the ways in which we can add strength to our position.

Southern Ontario should be recognized as a single marketing area. The forces that so dictate are easy to find: rapid urbanization, ease of transport, economies of large-scale operations, and the folly of numerous small semi-monopolies are a few. The experience in the State of Michigan demonstrates what we ought to effect without delay and further waste.

A strong, effective, semi-independent Milk Commission can bring order out of present chaos and create a climate within which confident action, including capital investment in modern facilities, will grow quickly. The Federal Orders in Ohio and elsewhere are eloquent evidence of what could be here soon. We should use the thirty years of experience achieved in these places by much trial and many errors.

The wisdom of having one strong producer-controlled marketing agency in the province, concerned primarily with the sale of raw milk, can no longer be debated seriously. The present arrangement has resulted in opposing producer interests, suspicions, and jealousies. Unfortunately, producers have been unable to manage their own salvation through co-operative effort, and government must arrange matters. We can see the potential advantages to producers and the industry as a whole by study of current arrangements in the United Kingdom, Minnesota, and British Columbia.

Milk of a uniform high quality has long been discussed—at least by a few people—in this province. There is no doubt that very great progress has been made in recent years. We are satisfied that dream can become reality in a short time and with benefit to all if there is resolution in government and throughout the industry.

Simplicity, coupled with determination to avoid creeping complexity, if established and maintained as a vital characteristic of the industry in Ontario, would add greatly to our success. We could point to the endless proliferation of rules and regulations, agencies, and entities in many jurisdictions as a good example of what to avoid. The present position in Ontario, while not extreme in some respects, is sufficient illustration of unnecessary complexity.

We are convinced that acceptance of changes of this kind will result in a modern milk industry that will fit appropriately into the economic life of this province.

Section 1

ONTARIO MILK COMMISSION

- (a) Establishment
- (b) The Commission
- (c) The Commission's Responsibilities
- (d) Duties of Supporting Staff
- (e) General

The present Milk Industry Board of Ontario was established in July 1957 and given the very broad powers and duties that are set down in Sections 5 to 12 of The Milk Industry Act.

The first Board consisted of three members: Judge A. B. Currey, Chairman, Mr. W. F. Jones, a retired processor-distributor of milk, and Mr. E. Kitchen, who was then associated with the production side of the industry. In September 1958 Mr. Kitchen retired and Mr. Gordon W. Greer, then a producer, took his place. Mr. Jones resigned in July 1961 and Mr. G. A. McCague, a man of wide and varied experience in agriculture and the Chairman of the Ontario Farm Products Marketing Board, was appointed in his stead.

In March 1962 Mr. H. A. Thurston, a retired processor-distributor who is still associated with milk transport, was appointed, bringing the membership to four. After the appointment of the fourth member, Mr. McCague, still Chairman of the Farm Products Marketing Board, appears to have taken little part in the affairs of the Milk Industry Board until he was appointed its Chairman in November 1963, to replace Judge Currey who had retired.

This Committee has studied some of the Board's decisions and was permitted to attend several hearings and other meetings conducted by the Board, the last of them on October 11, 1963. Mr. G. A. McCague was not present at any of these meetings and we have not observed his participation in Board affairs.

In general, the Milk Industry Board has met on two days at the beginning of each month. In addition, special hearings have been held in various parts of the province, about one every two months on average. The Board's Secretary has devoted most of his time to the Board's activities, but has had other responsibilities in the Dairy Branch of the Department of Agriculture. The Board has had no other staff. Whenever investigation and information

have been deemed to be necessary, the Board has relied upon the efforts of the Dairy Commissioner and his staff.

The Board has been severely criticized by representatives of all segments of the industry. Many people have been quite outspoken in expressing their general dissatisfaction. The Board has been accused of failure to enforce some Regulations, give written reasons for decisions rendered, hand down decisions without undue delays, take action to enforce decisions reached, and ensure that workable market agreements be established, filed, and enforced.

In fairness, it should be pointed out that too few of those who appeared before the Board presented factual information in a way that encouraged rational consideration of the matters at issue. Too often emotion, biases, and determination to preserve or extend vested interests dominated the hearings. Such behaviour, combined with growing complexity within the industry, obscure regulations, and the Board's uncertainty about its legal powers, resulted in decisions that were often unconvincing and ineffective.

After most careful assessment of all of the evidence that was available to us, this Committee has concluded that the milk industry has lost respect for and confidence in the Milk Industry Board, and that the Board should cease to function.

We are convinced that the milk industry is sufficiently important, and the problems associated with it so complex and so different from those associated with other agricultural products, that a separate authority is warranted. We recommend that a new body, which for the purposes of this Report will be referred to as the Ontario Milk Commission, be established.

Following is a somewhat detailed outline of the proposed Ontario Milk Commission. We write at considerable length because we wish to emphasize that the Commission is intended to be much more than a nominal replacement of the present Milk Industry Board, and because we would like to ensure that the failures attributed to that Board are not repeated.

(a) Establishment

The Ontario Milk Commission should be established under revised legislation to be known as the Milk Act. It should be responsible to the Minister of Agriculture, but retain maximum feasible independence.

The Commission should consist of a Chairman and two Commissioners appointed by the Lieutenant-Governor in Council. The first Chairman should be appointed for a five-year term, one Commissioner for three years, and the other for one year. At the

expiration of each of these terms, all appointments should be for five years in order to achieve continuity. No previous affiliation with the dairy industry is felt to be necessary or, perhaps, desirable, but each member of the Commission must have a background of proven administrative achievement. The Chairman should devote his full time to the Commission's responsibility, but the Commissioners need only serve on a part-time basis. The remuneration of the Chairman and Commissioners should recognize their substantial experience and ability to take independent action. In order to give some indication of this Committee's assessment of the qualifications required, we suggest that the Chairman's salary be a minimum of \$25,000 per annum, and that the Commissioners be retained on a per-diem allowance of \$100 with a minimum of \$6,000 per annum.

As soon as it is established, the Commission should assume direction of the milk industry, and the Milk Industry Board should cease to exist. The Commission would require an extended period of time during which to develop new policies, acquire appropriate staff, and prepare itself for the assumption of the greatly increased responsibilities which would fall upon it at the time that the Milk Producers' Pool, as outlined in the following section, begins to function. Probably one year is a useful interval to keep in mind. The establishment of this Commission would in due course result in transfer from the Dairy Commissioner of many of the duties with which he and his staff have been charged in recent years. It may be desirable to select a new title for the head of the Dairy Branch of the Department of Agriculture.

A small, able group of specialists would be required to provide the Commission with the information and advice necessary for the completion of its tasks. These experts will probably include an economist, a lawyer, an accountant, a statistician, an auditor, and a dairy chemist. It is possible that the economist could be retained on a consulting basis, and not be a full-time member of the staff, but he must be in close association with the operations of the Commission. We believe that each member of this group of specialists must be mature and experienced, although, again, not necessarily with experience in the milk industry. They should be senior people, deserving of salaries of at least \$10,000 per year, and should not be subject to civil service salary restrictions. There would, of course, be the necessary junior audit staff, secretaries, and clerks.

The Commission should have an office physically separated from those occupied by the Department of Agriculture. All members of the staff should be in direct association with this central office. It may be desirable for auditors and some others to be located throughout the province, but such arrangements should be kept to a minimum.

(b) The Commission

The Chairman of the Commission should be the chief executive officer and the director of all its activities, and should make most of the significant decisions. He should find it necessary to consult with other commissioners only on relatively few vital matters. During the period of organization, development, and early operation, much closer ties between the Chairman and the Commissioners would no doubt prove to be desirable.

All decisions made by the Chairman should be subject to review by the full Commission on appeal within thirty days by anyone affected by those decisions. The full Commission should hear appeals within thirty days of notice of appeal. A majority vote of the Commission would sustain or refute the Chairman's earlier decision. Review of the Chairman's decisions should be rare; if not, this would suggest important weaknesses in the Chairman or in the authority under which the Commission operates.

There should be provision for a limited right of review of the Commission's decisions by the Courts. That is, the Commission's decisions on questions of fact should be binding on all courts, but there should be right of appeal on matters of law and of the jurisdiction of the Commission. Appeals to the Courts should be infrequent or the Commission would cease to be effective.

Most industry problems should be solved without formal consideration by the Chairman. This will happen if there is well-drafted legislation, carefully designed regulations, and publication of the Commission's decisions with supporting argument. Effective organization of the Commission's staff, and the establishment of close liaison and working relationships with other authorities, provincial and federal, will contribute greatly to the Commission's success.

It should be clearly understood that members of the Commission should have no right to speak on its behalf unless authorized to do so in specified circumstances.

(c) The Commission's Responsibilities

The Commission's responsibilities and objectives should include the following:

- (i) general direction of the milk industry as set down in the proposed Milk Act and Regulations; recommendations for changes in legislation in order to safeguard the interrelated interests of producers, transporters, processors, distributors, and consumers, and to permit and encourage innovation and change;

- (ii) formulation of general policies and rules governing the conduct of the affairs of the industry as a whole; a statement of objectives, policies, and rules should be available to any interested party;
- (iii) establishment of long-range plans for the industry in order to encourage and facilitate the development and adoption of new techniques and arrangements;
- (iv) encouragement of expression of opinion by all interested parties at all times in order that the Commission be informed of industry developments; arrangement of invitational informal meetings with representatives of all interested in the industry;
- (v) holding of formal public hearings at times of crisis, and at other times, in order to achieve full review of vital problems concerning the industry; this would do a great deal to bring forth basic data, submit them to the scrutiny of all who may be interested, clarify current difficulties, and identify potential dangers;
- (vi) arbitration of major difficulties; these would be infrequent if the Commission functions effectively;
- (vii) licensing of all engaged in the industry in co-operation with the Dairy Branch of the Department of Agriculture, the Department of Health, and the Department of Transport, Ontario, and federal authorities; disciplining of licensees and levying of penalties for infraction of regulations;
- (viii) accumulation of extensive data concerning the acquisition, composition, and utilization of all milk produced or marketed in Ontario; without the control which this basic information will make possible, uncertainty, suspicion, and sharp practices will continue;
- (ix) monthly publication of Commission rulings, penalties levied, and new regulations under the Act in order to ensure prompt disclosure of the Commission's policies and decisions for the guidance of all interested parties, and in order to build up a body of jurisprudence for reference;
- (x) provision of information concerning the Commission's activity for use by trade publications and the public press;
- (xi) establishment, approval, and publication of the official blend price, monthly, for the Milk Producers' Pool;
- (xii) appraisal of the way in which bases are computed for individual producers, and assessment of the methods

whereby these bases are used by the Pool (the meaning of "base" is discussed at length in the next section);

- (xiii) discussion of interprovincial and federal matters with recommendations for action;
- (xiv) general supervision of elections conducted by any organization operating under the new Milk Act;
- (xv) responsibility for bonding in so far as it will continue to be necessary;
- (xvi) supervision of the disbursement of any funds made available in order to compensate holders of fluid-milk quotas at the time of the establishment of the Milk Producers' Pool;
- (xvii) the fostering of responsible leadership in all segments of the milk industry.

(d) Duties of Supporting Staff

This Committee wishes to establish clearly its conception of the responsibilities and activities that should be undertaken by the Ontario Milk Commission. For this reason we present a description of some of the duties we feel should fall to the senior staff already identified.

(i) Financial and Statistical Analyses

The Commission, through its accountant and statistician, should accept responsibility for examination and assessment of the financial position of the Pool and all processors, manufacturers, and distributors in order to safeguard the financial rights of all and to ensure financial stability within the industry generally. Frequent financial statements should come from all who purchase milk. Study of them should result in detection of potential dangers and discussion of existing difficulties. Efforts of this kind would minimize the need for bonding, though they may not eliminate it.

We believe that in the past too little effort has been made to accumulate information concerning the industry as a whole, and too little energy devoted to the maintenance of desirable controls over individual operations. Because there has been little knowledge of the way in which milk has been utilized within individual plants, it has often been difficult to determine when regulations and marketing agreements have been broken. This problem has been greatly aggravated by the difficulty of interpreting badly-written, ambiguous agreements. In future, there should be a comprehensive check on the total milk flow throughout the province, the use made of it, transfers between plants, shrinkage, and all other factors necessary to achieve complete accountability.

The Commission's staff should design and modify, with changing needs, necessary report forms, and give instruction and guidance to those from whom they are required. Each handler should report all purchases of milk, its disposition, and other pertinent details. From this information it would be possible to prevent illegal use of milk, ensure that proper prices are paid for it, and compute the blend price for pooled milk. Valuable statistical data would result, intelligent use of which would result in better co-ordination within the industry.

(ii) Audits and Investigations

The auditing staff should examine all essential records affecting the industry. This would include payments to the Pool and payments by the Pool to producers, transporters, and others.

The auditing staff should co-operate with the accountant in his concern for the general financial health of individual units, and should be able to offer useful advice and guidance.

The activity necessary to achieve these objectives is not as extensive as might be assumed. Effective internal controls within individual organizations, the growing size of milk-handling establishments, and the intelligent use of test audit procedures would permit fulfilment of these responsibilities without undue cost.

(iii) Assessment of Composition and Quality

The chemist, with a small staff, should assume responsibility for general supervision of the sampling and testing of raw milk and the products manufactured from it in order to reinforce the efforts of the audit staff to account accurately for the utilization of all milk. The chemist would be available to provide expert opinion, after appropriate study, on complaints to the Commission having to do with sampling procedures, grading, composition, quality, testing for milk-fat or other components, and other related matters.

(iv) Economic Studies

The Commission should undertake continuing research into costs in all segments of the industry, and studies of production and marketing problems. Studies of this kind would permit useful long-range planning, and should result in intelligent administration and effective leadership.

(v) Legal

The lawyer, in addition to providing legal advice to the Commission, should arrange public hearings and formulate proposed

revisions in the Act and Regulations under the Act. He might act as secretary to the Commission or executive assistant to the Chairman. Although we recommend that the Commission have a lawyer as a member of its senior staff, we do not encourage the Commission or the milk industry generally toward highly legalistic behaviour. The lawyer's success will be measured in part by the extent to which he is able to avoid legal actions involving the Commission.

(e) General

The Commission would have principal responsibility for the success of a major industry. In order to function most effectively the Commission must be free to think about and reflect upon vital problems and trends of the industry. It should not permit itself to be preoccupied with or overwhelmed by an endless succession of trivial considerations. These ought to be dealt with by the staff as routine matters within the well-designed framework of policies and procedures that should be established by the Commission.

Section 2

MILK PRODUCERS' POOL

- (a) General Outline
- (b) Establishment
- (c) Scope of Pool's Activity
- (d) Responsibilities of the Board of Directors
- (e) Supporting Staff
- (f) Membership in the Pool
- (g) Sale and Pricing of Pool Milk
- (h) Bases
- (i) Distribution of Pool Proceeds
- (j) Financing Pool Operations
- (k) Ontario Whole Milk Producers' League
- (l) Compensation to Holders of Fluid-Milk Quotas

The Order-in-Council establishing this Committee directed that we make "such recommendations in respect of a plan for the marketing of milk as, in the opinion of the Committee, would be applicable to conditions in Ontario".

The present arrangements for the marketing of milk in this province are described in Part A. In general terms, there are four organizations representing milk producers:

- (i) The Ontario Whole Milk Producers' League, which is responsible for all collective bargaining on behalf of producers supplying fluid milk to any of the 225 markets and areas named in Schedules 1 and 2, Regulation 424 under the Act;
- (ii) The Ontario Concentrated Milk Producers' Marketing Board, which operates a Marketing-for-Processing Plan under Regulations 425 and 426;
- (iii) The Ontario Cheese Producers' Marketing Board, which through a co-operative created under the Corporations Act, has power to regulate and control the marketing of cheese locally within Ontario under the Ontario Cheese Producers' Marketing Plan as authorized by Regulations 422 and 423;

(iv) The Ontario Cream Producers' Marketing Board, which has power to control the marketing locally in Ontario of cream produced in Ontario and delivered to plants for manufacture into creamery butter, under the Marketing-for-Processing Plan authorized under Regulations 427 and 428.

Accurate information concerning the membership of these organizations is not available. There is no doubt that many producers move from one group to another and that some are claimed as members by two or more groups in a given year. It is also certain that membership is sometimes established as the result of making one or a few small shipments of milk or cream.

There is no doubt that many farmers now identified as Concentrated and Cheese Milk Producers are supplying milk of a quality which could be accepted as fluid milk under present regulations, and that some cream producers could also supply fluid milk without difficulty. It is equally certain that some producers now supplying milk for fluid use are not maintaining the standard of premises or the level of quality required under the Regulations.

At the present time the net return to fluid-milk shippers is greater than that to nearly all other producers. The premium received by fluid shippers varies greatly and is not as substantial as many people believe. The higher price paid to fluid shippers is justified in the minds of many people because, it is alleged, costs of production are higher in the fluid segment of the industry than in others. The reasons for the higher costs associated with fluid-milk production are usually related, directly or indirectly, to the cost of establishing and maintaining quotas. These contentions are subject to question and are examined in Part C, Section 1, and elsewhere.

The Ontario Royal Commission on Milk, 1947, reported:

"One cannot examine the producer's general position without coming to the conclusion that the eventual solution of the difficulties facing whole milk producers, and probably all milk producers in the province, lies in the setting up of a marketing organization that will control the disposal of all milk produced by fluid milk producers for the fluid market, and ideally of all milk produced in the province.

"From the evidence that I have heard, this seems to be an inescapable conclusion. Nevertheless, equally from the evidence, I can only say that at the present time I question very much whether the farmers in Ontario in general, or the whole milk producers in particular, are ready for such a drastic move. However, in my opinion it is the ultimate and only effective solution of their marketing difficulties."

Since Mr. Justice Wells wrote these words seventeen years ago, there have been many serious efforts to bring the various groups of milk producers together in order to establish a plan for the marketing of milk in Ontario. These ineffective efforts have been described at some length in Part A, Section 2.

This Committee is convinced that the milk producers in this province are now ready to accept a comprehensive plan that would permit all who are able to supply milk of required quality to share equitably in the fluid market. We could cite much evidence in support of our belief, but limit ourselves here to the views expressed to us by the duly accredited representatives of the four groups of milk producers identified earlier in this section.

(i) Representatives of the Ontario Whole Milk Producers' League appeared before the Committee on August 1, 1963, and in the Brief are these words: "Attached to this Brief is a set of proposals for a Marketing Plan already agreed upon by the Ontario Concentrated Milk Producers' Marketing Board and the Executive of the Ontario Whole Milk Producers' League." As the last two pages in this Brief there were "Proposals for a Milk Marketing Plan", the first item of which suggested, "That there be a Marketing Plan sponsored by the Ontario Whole Milk Producers' League and the Ontario Concentrated Milk Producers' Association". This document outlined a two-phase proposal for the development of a plan to market milk, including the establishment of a marketing board, and proposed that, "All Class A producers would share equally in the returns from fluid utilization, and their total amount of milk marketed blended as to price."

(ii) The Ontario Concentrated Milk Producers' Marketing Board's representatives appeared before the Committee on July 29, 1963, and made a submission which included:

"We believe that a Milk Marketing Plan covering, at first, fluid milk and manufacturing milk, should go into operation as quickly as possible. Our concern for fluid milk and manufacturing milk in a marketing plan derives from the fact that as we have shown, the markets and the interests of producers in these two groups have much in common even in conflict. If the difficulties faced by each group and which are inherent in the marketing of both classes of milk can be solved, our Board believes that the other problems will be minimized to the extent that all milk ultimately can be included in a milk marketing plan."

Attached to this Brief were two pages titled "Proposals for a Milk Marketing Plan". These proposals were in every detail identical with those made to us by the Ontario Whole Milk Producers' League, and referred to above.

(iii) The Ontario Cheese Producers' Marketing Board's representatives appeared before the Committee on August 27, 1963, and presented a document signed by Mr. H. C. Arnold, Chairman, which stated:

"For a number of years, a milk marketing plan has been discussed among the four milk groups of this province. Several types of plans have been advocated but none have been acceptable. It is the opinion of the Directors of the Ontario Cheese Producers' Marketing Board that an Ontario milk marketing plan should be established without delay."

(iv) The Ontario Cream Producers' Marketing Board's representatives appeared before the Committee on August 6, 1963, and presented a Brief which stated:

"The Board believes that in the best interests of cream producers in particular, and the Dairy Industry in general, marketing can best be planned and administered by one overall board so that among other things milk can be directed into the products that will best serve our known and anticipated markets and bring the greatest return to producers."

Many other statements made to us by individuals and spokesmen for local organizations endorsed the views of the provincial bodies and confirmed our belief that the milk producers of Ontario are ready to accept an over-all plan for the marketing of milk.

During 1962 a Provisional Milk Marketing Board met on many occasions and made serious efforts to create a detailed framework within which an over-all marketing plan might function. Under date of July 4, 1962, this Board printed a "Suggested Plan for the Marketing of Milk, Fluid Milk and Cream for Consideration of Producers", and "Regulations for the Marketing of Milk, Fluid Milk and Cream for Consideration of Producers". These documents were intended to be the basis for a new milk Act and the necessary regulations under it. We have studied these documents and the efforts of the Provisional Milk Marketing Board before and after July 4, 1962. It is our opinion that the proposed plan failed to gain more general acceptance largely because of the following factors:

(i) representatives of some segments of the industry were unwilling to make concessions that were in the best interests of the industry as a whole;

(ii) the Provisional Board did not go far enough in its efforts to explain the plan to the producers of Ontario and to the general public;

(iii) there was never any clear agreement on at least three vital subjects: the method to be used in establishing quotas, the

way in which existing producer groups were to be represented on their proposed Milk Marketing Board, and the extent to which that Board was to acquire physical facilities and become involved in the processing of milk and the marketing of milk products;

(iv) important personality differences between a few members of the negotiating groups;

(v) many officers and directors of existing organizations were afraid that they would lose their voice in industry affairs.

All of this is clearly displayed in the records maintained by the Provisional Milk Marketing Board in its formal Minutes, and in our conversations with those intimately associated with the Provisional Board.

On March 20, 1964, this Inquiry Committee met with six senior representatives of the Ontario Whole Milk Producers' League and the Ontario Concentrated Milk Producers' Marketing Board, including the President of each organization. The purpose of the meeting was to review the joint efforts made by these two groups to develop a marketing plan for milk, and through hypothetical questions to explore their attitude toward certain vital features of the several plans we had under consideration at that time. At the beginning of the meeting all producers present appeared to speak with one voice. It was not long, however, before we were surprised and disappointed to find that there was disagreement among those present on important matters. As an example, there was no agreement on the meaning of the vital phrase "the direction of milk". Finally, we came to the conclusion that these two groups of producers would seek for a very long time before evolving a workable plan that would be accepted by their members. We also concluded that it would be all the more difficult to achieve agreement if the Ontario Cream Producers' Marketing Board and the Ontario Cheese Producers' Marketing Board were included in the plan.

For these reasons we have set down below a somewhat extended description of the marketing arrangements that appear to us to be suited to the needs of this province at this time. We believe that our plan is flexible and would permit the Pool to adapt to changing circumstances in the industry.

During our public hearings we made special efforts to explore the present attitude of milk industry people toward the way in which a marketing plan should be established. There was disagreement, but we are persuaded that in spite of the characteristic independence of Ontario farmers, and their unwillingness to be regimented, they are prepared to accept a plan devised by the govern-

ment of this province and established without vote of the usual kind. Statements in support of our conviction will be found in Part D, Section 6, Exhibit IX.

Because of the statements made by responsible representatives of the industry, and because of the urgency expressed by them, we recommend that the Ontario government establish the following milk marketing plan. For the purposes of this Report, we refer to the key organization associated with this plan as the Milk Producers' Pool.

(a) General Outline

The Ontario Milk Producers' Pool should be a member-controlled milk marketing organization with complete authority to bargain. Its main task should be to promote the general long-term interests of its members, and in particular to seek out most-profitable markets for their milk.

The Pool should be established as a non-profit corporation, without share capital, under Part III of the Ontario Corporations Act. Its Charter should be established in close consultation with the Ontario Milk Commission, recommended in Part B, Section 1, and all changes in it should be approved by the Commission.

The Pool should handle only "A milk". All milk used by plants in southern Ontario that handle fluid-milk products should be purchased from the Pool. The present definition of fluid-milk products should be extended to include additional items.

"A milk" is intended to be that milk testing Grades 1 and 2 on the Resazurin reduction test, Regulation 432, which has been produced on premises which are in compliance with that or successor Regulations.

We suggest that southern Ontario be defined as the Counties of Ontario, including the Provisional County of Haliburton.

All farmers should have equal opportunity to participate in the Pool, and the Pool should be required to accept all "A milk" offered to it by producers.

Producer-distributors and co-operative dairies should be required to deal with the Pool in exactly the same way as all other producers and distributors.

"A milk" from producers who do not choose to participate in the Milk Producers' Pool could be marketed through many other channels.

Cream shippers should continue to market their product in the present fashion, and the Ontario Cream Producers' Marketing Board should continue to function.

(b) Establishment

We feel that the development of the Pool can be discussed most usefully in three stages.

(i) Stage 1

The first stage would cover the period of time during which the Pool is being organized and would end when the Pool assumes operating responsibility. Some time would be required to permit preliminary, sound development, and probably one year is a useful interval to keep in mind.

The Chairman

The first Chairman of the Milk Producers' Pool should be appointed by the Lieutenant-Governor in Council to act as chief executive officer. This would be a full-time responsibility. The Chairman would require extensive authority to build a sound organization and to select a staff to operate this substantial enterprise effectively. He would have to be experienced, capable of creating a new and somewhat unusual organization, and able to direct its activities. He should not have any previous experience or affiliation in the dairy industry in Ontario, nor any present or past association with the Ontario Department of Agriculture. We make these proposals, some of which may appear unconventional, in order to ensure maximum independence and impartiality in the formative stages.

We believe that the establishment of this Pool would be a difficult and demanding undertaking. In order to emphasize this belief, we suggest that the first Chairman be paid a minimum salary of \$25,000 per annum in recognition of the abilities required. This salary level may not be necessary after the Pool is established and comes to maturity. We suggest also that the first Chairman be guaranteed three years' salary in order to persuade those with appropriate experience to consider a short-term appointment although they might not be willing to contemplate an extended term in office.

We suggest that the first Chairman's term of office should end when the Pool has achieved the maturity and experience essential to total independence—that is, when it reaches Stage 3 as described in this section of our Report.

Advisory Committee

We recommend that during the first and second stages of the life of the Milk Producers' Pool there be an Advisory Committee of nine members. The purpose of this Committee would be to provide the Chairman with ready access to existing producer organizations, and to the broad and diversified experience of those already in the milk industry. This Committee could make an important contribution to the development of the Pool and provide a bridge between current arrangements and those we propose for the future.

Three members of the Advisory Committee should be appointed by the Lieutenant-Governor in Council in consultation with the first Chairman of the Pool.

Six members should be elected by milk producers, two representing each of the three presently established milk producer groups, i.e., the Ontario Whole Milk Producers' League, the Ontario Concentrated Milk Producers' Marketing Board, and the Ontario Cheese Producers' Marketing Board. This will permit adequate representation of presently established interests. From the beginning it should be clearly understood that the distinctions between these three existing groups should disappear as quickly as possible.

The elections referred to in the preceding paragraph should be supervised by the Ontario Milk Commission. Extreme care would be required in order to ensure that every producer has full opportunity to understand the issues involved, to assess the qualifications of candidates, and to vote.

We suggest that any producer, whatever the rating of his premises and milk, or any other person, be eligible for nomination and election as a member of the Advisory Committee. Nominations could be made in either of two ways. First, each of the three present milk producer Boards could nominate one or more candidates for each of the two places on the Advisory Committee assigned to their organization. Second, any substantial number of licensed producers—say twenty-five—within any of the three established producer groups could put forward a candidate to compete for the two positions available to that group.

After this election, all identification of members of the Advisory Committee with producer organizations should disappear and they should no longer be associated with a particular sector of the industry.

The term of office proposed for each of the three appointed and six elected members of the Committee is described under Stage 2.

Communication

From the beginning there should be clear recognition of the importance of effective and regular communication between the Pool and every producer of milk in the province. A monthly publication of the kind often found in such organizations should play a useful part in this undertaking, and should be established at the earliest possible date.

From the beginning the Chairman of the Pool should encourage communications from all who wish to express their views. As the Pool gains maturity there should be extensive provision for communication at all levels in the organization.

Costs

We recommend that all costs associated with Stage 1 of the Pool should be the responsibility of the Ontario government.

Head Office

The Pool's head office should be separate from those of all other milk industry establishments, but this should not interfere with good communication with other segments of the industry.

(ii) Stage 2

The second stage in the life of the Pool should be considered to begin at the time the Pool starts to purchase and sell milk, and end when the Lieutenant-Governor in Council declares it to be a mature organization.

Chairman

The Chairman appointed at the beginning of Stage 1 should continue to direct the Pool's activities into Stage 2. His most important responsibility should be to select a general manager in consultation with the Advisory Committee. The Chairman should hand over full responsibility for executive decisions to the General Manager before the end of Stage 2.

General Manager

The General Manager should be able to assume all executive authority and responsibility early in Stage 2, and direct the day-to-day operations of the Pool. He should be subject only to the general over-all authority of the Chairman and should implement the policies that are developed in consultation with the Advisory Committee.

Advisory Committee

The Advisory Committee as constituted during Stage 1 should continue to function throughout Stage 2, unless this is longer than one year.

If Stage 2 lasts for more than one year, the Lieutenant-Governor in Council should require the resignation of three members of the Advisory Committee whom he shall designate. They should be replaced by three members to be elected by the general membership of the Milk Producers' Pool under the supervision of the Ontario Milk Commission. Those who have just resigned as members of the Committee should be eligible to stand for re-election. As noted above, the members of the Advisory Committee and candidates for it should no longer be identified as representatives of a particular producer segment. This procedure should be repeated annually throughout Stage 2.

Pool Members

All members of the Pool should be eligible to vote. A member of the Pool for this purpose would be anyone to whom the Pool made a payment for milk shipped to the Pool during the month preceding an election.

Finances

When the Pool begins to buy and sell milk it should assume full responsibility for the financing of its activities. Some comments in this connection will be found later in this section of our Report.

(iii) Stage 3

The third stage of the Pool's operation should begin when it has reached maturity—that is, when it has begun to operate effectively, and this has been recognized by the Lieutenant-Governor in Council and date of maturity established. At this time the members of the Pool, through their duly elected representatives, should assume full responsibility for direction and control of the Pool's activity.

Chairman

The appointed Chairman should retire at the end of Stage 2 and be replaced by someone elected by the Board of Directors, either from among themselves or from outside the Board. The Chairman might, but need not, be a milk producer. The former appointed chairman might be elected to continue in office.

By this time the chairmanship should not be a full-time position. The active direction and control of Pool operations should be the responsibility of the General Manager and his staff.

The elected Chairman's term of office should be three years, with provision for not more than one additional term.

Board of Directors

The Advisory Committee should cease to exist at the end of Stage 2. The first Board of Directors should consist of all *elected* members of the Advisory Committee, plus those required to replace retiring *appointed* members. The election for such replacement should be held before Stage 3 begins; at such an election all Pool members should be eligible to vote.

During Stage 3, which would last indefinitely, three directors should retire each year and be eligible for re-election.

(c) Scope of Pool's Activity

The Pool's primary responsibilities should be to provide all milk used for fluid purposes in southern Ontario, and to buy all "A milk" offered to it by licensed producers. We recognize that very small shipments of milk would result in high unit costs to the Pool, but we believe that every shipper should have equal opportunity to pool his milk. We expect that the fixed costs associated with keeping premises in compliance with regulations, and continuing change-over to bulk handling will result in large and regular shipments from most farms, and that the higher costs associated with a few small operators will not be unbearable for the Pool. "A milk" produced outside southern Ontario should be received by the Pool and paid for at the blend price adjusted for extra transport and other direct costs arising from the producer's location.

In order to achieve these objectives, the Pool must make extensive arrangements for the transport, storage, and sale of all milk offered to it. This will require complex negotiations with those who transport and buy milk, the execution of important contracts, and the handling of substantial sums of money.

(i) Direction of Milk

The Pool should devote its major energies to selling milk in its raw form at the best possible price. It should be able to enter into contracts, desirable in the circumstances, for the sale of all milk that comes to it. In the first years of Pool operations it is likely that most Pool milk would be sold for fluid use. Milk in excess of the demand for fluid consumption should be sold in its raw form to

existing manufacturers in so far as this is possible at satisfactory prices.

In order to secure strength in bargaining, the Pool should be free to contract with those who own manufacturing facilities for the processing of Pool-owned milk into any milk products, and for the conversion of one milk product into another. These products would be the property of the Pool until final disposition appears to be appropriate. Although the holding of inventories, and the assumption of the risk and carrying charges associated with such activity is undesirable, it cannot be avoided if maximum returns are to be secured for Pool members.

The Pool should *not* have the authority to buy any milk or milk products other than raw milk.

(ii) Physical Facilities

The Pool should not be permitted to acquire transport, processing, or storage facilities without the special approval of the Ontario Milk Commission. One reason for this restriction is that there is much unused transport, processing, and manufacturing capacity in this province and elsewhere in Canada at the present time. We are convinced that the Pool should concentrate on selling raw milk, and let those with experience in other sections of the industry continue to allocate resources to new facilities and make decisions which must be based on expert knowledge of specialized markets. We believe that a policy of this kind would be in the best interests of the Pool and the industry under present circumstances.

(iii) Collective Bargaining

The Pool would find it necessary to enter into varied contracts with processors, distributors, transporters, and others. Many of these would be simple arrangements of a repetitive nature, but others would involve collective bargaining on important and complex matters with experienced representatives of powerful interests.

The future success of the milk industry in Ontario will depend in large measure upon the results of the collective bargaining between the Pool and the organizations with which it must deal.

The staff of the Pool should be able to negotiate skilfully, always keeping in mind the broadest interests of the industry. The Pool should be prepared to retain outside experts from time to time if it is to protect itself adequately.

Rapid change has characterized the industry in recent years, and will continue to do so. In designing all contracts, serious efforts

should be made to retain a substantial degree of flexibility. Only in this way would it be possible to achieve the maximum benefits that should flow out of new developments.

(iv) Pooling

The Pool should serve as the central settlement point. Proceeds from the sale of pooled milk, less necessary costs of operation, including transportation, should be disbursed monthly to Pool shippers. Payments to an individual producer would be based on the official blend price established by the Ontario Milk Commission, the standard of milk content established from time to time, and the test of the milk shipped by the producer during the month in question. There may be other minor adjustments in special circumstances.

Pooling is discussed later in this section, as are problems and principles of milk pricing.

(v) Transportation

The Pool will have an important opportunity over a period of time to develop transport arrangements which minimize costs and result in important savings to producers and to the community. These savings should be increasingly important as bulk hauling is more widely adopted, and farm units increase in size. Reduction of transport costs is an important illustration of the many ways in which the Pool could act effectively in the interests of the milk producers of Ontario.

(vi) Northern Ontario

The Pool's activities would be limited to southern Ontario for the most part, but should be related to the milk industry in northern Ontario in a number of ways. Each part of the province would be subject to the same general legislation and would have interests in common with the other.

The resources and experience of the Pool should be available to the relatively small market areas in northern Ontario on request at cost. The Pool should be willing to share its understanding of economic conditions, bases, pooling, pricing, and the industry generally. Pool specialists should be ready to advise and assist in collective bargaining and in formulating long-term policies and plans.

The Pool should have no jurisdiction over northern Ontario but should accept "A milk" from producers in that area, subject to reasonable charges for the extra direct costs involved. Pool milk should not be sold in northern markets except in the event of shortage in them and then at the established price in the northern market.

There should be continuing recognition of the possibility of extension of the Pool area when sound studies demonstrate this to be feasible.

(d) Responsibilities of the Board of Directors

Our studies of the milk industry have led us to the conclusion that there has been lack of understanding by producer bodies of the responsibilities of boards of directors, and of the role of the members of these boards. Board members of milk industry organizations have sometimes meddled in operating details, and in other cases have been no more than uninterested and uninformed rubber stamps. It is our opinion that a board of directors should be purposeful, and act as a unit, or serious damage will result.

The primary responsibility of the Pool's Board of Directors should be to act in the best long-term interest of Pool members as a group. It should give intelligent consideration to all significant milk industry problems and achieve a broad understanding of all related circumstances.

The Board should limit its activity to the determination of general policy and should not attempt to administer policy; in other words, it should not be an operating board.

We have already indicated our belief that the Board of Directors should be elected and controlled by those who ship milk to the Pool. It is probable that these milk shippers will assume that all members of the Board of Directors should be milk producers. We suggest that this long-standing inclination be reviewed; the Pool's Board of Directors might be much better balanced, stronger, and better able to fulfil its responsibilities if one or more members had little or nothing to do with the production of milk, or indeed with the milk industry in any capacity. We suggest that a number of experienced persons, perhaps drawn from the fields of finance, marketing, and administration, might make an important contribution to the welfare of this organization, but the number of such members should be limited. In our outline of the establishment of the Pool we made provision for such possibilities.

As we see the matter, the responsibilities of the Board of Directors of the Pool are little different from those of any policy-making board, but in view of the past history of producer boards, we make the following suggestions. The Board should undertake:

- (i) establishment of general policies;
- (ii) determination of general objectives;
- (iii) appointment of senior operating executives;

- (iv) review and approval of long-term plans and related budgets;
- (v) frequent consideration of current financial position and operating results;
- (vi) major changes in the general structure of the organization;
- (vii) delegation of authority to designated persons and organizations to act on behalf of the Pool;
- (viii) achievement of long-term stability in spite of changing circumstances.

The decisions made by the Board should become effective through the General Manager and the others acting under his direction and responsible for day-to-day operation of the Pool. As a general rule, the General Manager should attend all Board meetings in order that he may have full opportunity to understand the Board's reasoning and objectives and thus be able to convert them into effective action.

The Chairman of the Board should not become involved in detailed operating decisions, but should be available to the General Manager for discussion of situations that raise questions of policy. The Chairman should ensure that the establishment of general policy does not pass by default to the General Manager. He must make certain that there is clear separation of the responsibilities for formulating and for executing policy. He would probably find it necessary to communicate with other members of the Board informally and frequently between formal meetings of the Board.

An Executive Committee of the Board may be desirable, but it cannot be assumed that this will be necessary.

As a general rule, individual Directors should have no direct communication with employees of the Pool. As Directors, they should recognize that they have no authority over any employee, including the General Manager. The Chairman of the Board should be the only person authorized to speak for the Board unless there is specific contrary agreement.

(e) Supporting Staff

The General Manager as the chief operating executive should be in charge of the general operations of the Pool. He should be responsible for all major decisions, and the issuing of general instructions to his senior assistants. He should recommend policy changes and long-range plans for the consideration of the Board of Directors

and keep the Board informed of all major problems and trends. He should interpret the decisions made by the Board and see that they are converted into action at all levels within the organization.

The General Manager should be in general charge of price negotiations with producers, transporters, processors, manufacturers, distributors, and others, but would entrust much of this responsibility to his subordinates. He should be in frequent and direct communication with the senior executive officers of the Milk Commission, the Department of Agriculture, and other organizations with which the Pool would deal.

There should be a number of senior subordinates more directly responsible for the Pool's complex and extensive activities. The operating or line officers should include assistant managers in charge of marketing, bargaining, transport, and quality, including sampling and check testing. Other specialized responsibilities should be assigned to the Secretary, Comptroller, and probably someone responsible for public relations. In order to achieve effective operations, the Pool must employ able and experienced people for each of these positions and pay them the rates current in the community for such responsibilities. The successful producer organizations in Canada, the United Kingdom, and the United States prove the wisdom of this policy.

There should be no need for us to emphasize the importance of clear definition of the duties of each of these officers, effective integration of their activities, and the preparation of frequent statements disclosing the financial affairs of the Pool, including budgets, forecasts, and the many analyses that are essential to the intelligent management of Pool affairs. Suitable data-processing equipment would facilitate record-keeping of all kinds including settlements with producers, the compilation of bases, and so on.

In its early days the Directors of the Pool and the General Manager would no doubt find it necessary to secure expert advice from a variety of consultants including economists, legal authorities, marketing experts, and those competent to design and install data-processing equipment.

The Pool would need a group of competent fieldmen to deal directly with the members. The primary objective should be to assist producers with quality problems and to urge each Pool producer to assume the maximum possible responsibility for the quality of his milk. At the same time, the fieldmen would be able to make important contributions to the welfare of the Pool by interpreting regulations and smoothing out administrative difficulties and uncertainties.

We need not go further in our efforts to describe the activities and staff of the Pool; if there were proper over-all organization, details would take care of themselves.

(f) Membership in the Pool

As already noted, any producer of "A milk" should be free to ship any quantity to the Pool, and by so doing become a member. Details of the fundamental relationships between the Pool and its members should be clearly established in the Pool's by-laws, and these should be readily available to all who wish to see them. The most significant elements of a producer's contract with the Pool should be embodied in a simple written membership agreement. This is important in order that producers understand their rights and obligations as members of the Pool and that the Pool be able to organize its activity in a systematic and business-like manner.

The relationships between producers and the Pool should include such things as these:

- (i) Notice of intention to enter the Pool should be required of each producer. For example, it might be stipulated that shippers would be admitted on a few specified dates each year, and that sixty days' notice of intention to enter be provided. Notice and waiting period might be waived at the discretion of the Pool.
- (ii) Notice of producer intention to leave the Pool should be required. For example, it might be agreed that one month's notice be given by a shipper, or a penalty incurred.
- (iii) Producers leaving the Pool voluntarily should be required to observe a waiting period before re-entry.
- (iv) Quality problems should be defined, and the manner in which chronic offenders are to be treated should be formally established and the rules enforced. For example, it might be reasonable to provide for suspension for sixty days of any producer whose milk falls below Grade 2 Resazurin more than twice in any given period, say six months. It might also be reasonable to provide that after a second suspension, a producer be re-admitted to the Pool only with the approval of the Ontario Milk Commission.
- (v) Times at which payments to producers are to be made should be stated. It might be reasonable to establish an interim payment, on the last day of every month, of 50 per cent of the estimated total for that month. The balance for any month might be payable on the 15th of the follow-

ing month. All payments should be accompanied by a full statement of the way in which the computation was made, and every producer should be entitled to a written explanation of the details contained in the statement.

(g) Sale and Pricing of Pool Milk

Pool milk sold for fluid use, as defined by regulation, would be referred to as "A-1 milk". The remainder would be available for other purposes and would be known as "A-2 milk". As noted above, the Pool would no doubt find it desirable from time to time to direct some of the flow into milk products for its own account, using existing facilities on a contract basis. Action of this kind would greatly strengthen the Pool's bargaining position and permit it to maximize prices and to take advantage of support payments made available by the federal government.

We believe that the relatively free working of competitive forces operating through the price mechanism would best serve the long-term interests of milk producers, processors, manufacturers, consumers, and society at large. In our opinion, this means that there would be adequate supplies of milk and milk products available to consumers at the best possible prices but yielding normal profits to producers and all handlers. This does not necessarily imply profits for all in the milk industry, or for inefficient participants.

As stated earlier, the Pool would be required to accept all "A milk" offered to it, and all milk going into plants that process for fluid consumption would have to be purchased from it. These requirements are an important key to the pricing mechanism. The Pool would provide important bargaining strength for its voluntary producer members, but it would not have control of all milk coming to market. Producers would be free to sell their milk outside the Pool as they saw fit, and anyone who wished to purchase milk, other than for fluid plants, would be free to buy from the Pool or outside it. It appears to us that these arrangements would result in healthy competition, without undue bargaining power resting with any one organization or group of organizations.

Collective bargaining between the producers represented by the Pool and an association of fluid-milk processors would provide the primary basis of pricing within the industry. Each group should bargain in well-informed good faith, and with the best interests of the industry as a whole in mind. Each should recognize that higher than normal prices and profits in the short run might not result in the highest possible net returns over a long period. Under such circumstances, negotiation of price is a matter of great importance to all concerned. Genuine negotiations based on sound knowledge of

market conditions would result in sensible pricing. In the event that negotiations broke down, it would be the responsibility of the Ontario Milk Commission to arrange a public hearing and arbitrate a decision to be binding on both parties.

The Pool should have sound basic information upon which to plan. It should be able to estimate with considerable accuracy the rate of flow of milk for many months ahead, and to match this with sales contracts or manufacturing agreements for Pool account. Supply could never be predicted precisely, of course, and demand will fluctuate too, but the Pool should be able, with the help of past experience and skillful programming, to balance the two.

It may be useful to think of Pool sales contracts under three main categories. The Pool's fundamental agreements would cover "A-1 milk"—i.e., fluid milk—sales, and these contracts might well run for one year. Under them the Pool would, through negotiation, agree to supply a stipulated quantity of milk to the bargaining processors at an agreed price. The price would be the same for all processors in southern Ontario. There should be provision for monthly deviations above and below the contract quantities of milk, and small penalties for deviation from them.

In the early stages, "A-2 milk" for non-fluid utilization would probably be sold under relatively short-term contracts. The period would be one or a few months, and prices would be set to cover the stipulated time. It is possible that manufacturers would organize to negotiate as an association, but it is likely that some would choose to bargain independently. As a result, there would be a variety of prices for "A-2 milk" at any given time, but the probable range should be only a few cents per 100 pounds. Again, it would be advantageous to both parties to these contracts to have flexibility as to quantities with small price penalties for deviations from agreed terms.

Finally, the residue of Pool milk should be sold on a daily basis at spot prices to those who wish to buy. If the prices offered were not satisfactory to the Pool, this milk would be directed into appropriate manufacturing facilities under contracts negotiated to cover a substantial period of time, with provision in them for substantial variations in milk flow. If estimates of milk supply are accurate and basic contracts are formulated with care, this residue should not be substantial.

A Milk Exchange at which all buyers and sellers of all "A-2 milk" would be free to establish prices by auction might serve a useful purpose. The facilities would be available to the Pool and to any others who wished to make use of them. It would be a neutral information centre, essentially, and would do a good deal to eliminate

imperfections in the market and to encourage the free working of competitive forces in the dairy industry.

At the present time the Canadian dairy support programme provides for a payment to milk producers of 13.3c per pound for milk-fat going into butter, but this does not apply to producers shipping a portion of their milk to fluid-milk plants. However, special consideration is given to producers in British Columbia whose milk is delivered on a Pool basis. There seems to be no reason why similar treatment would not be accorded to those shipping to the Ontario Milk Producers' Pool, with benefits accruing to all members.

(h) **Bases**

The Pool should develop a set of "base principles" which will permit each Pool member to establish a daily base to be used in computing payments for milk delivered to the Pool. The purposes to be achieved are stability within the Pool, equitability for Pool members, and better year-round balance between the supply of and demand for milk. The experience in other jurisdictions is that bases of this kind tend to reduce seasonal variations in production.

The base system we have in mind bears little resemblance to the quota arrangements which are current, and which have been so troublesome and controversial in Ontario in recent years. In brief, the new base system should permit new producers to enter the Pool on short notice and allow all producers to establish a base of any magnitude within a reasonable period of time. Bases would be valid only for the year for which they were established, and would therefore have little or no sale value. They would be transferable from one producer to another, subject to registration by the Pool.

We have not attempted to establish the details of the base forming procedures. Fundamentally, however, a producer's base would be determined by his average daily shipments during a period of low production, perhaps September to December. There would be detailed provisions to ensure equitable treatment of each producer and to deal reasonably with the unusual circumstances affecting individual producers from time to time.

This base system is intended to apply to all Pool shippers, regardless of their location. The same general rules would apply to each producer.

The Federal Milk Marketing Orders in the South Michigan and Minneapolis-St. Paul, Minnesota Marketing Areas reflect long experience with bases of this kind. We have included excerpts from these Federal Orders in Part D, Section 6, Exhibit VII in order to further illustrate the general nature of our present proposal. The

arrangements which are desirable in southern Ontario must be determined by reference to local circumstances.

(i) Distribution of Pool Proceeds

Here is a brief outline of the general procedures which would be followed in distributing to members receipts from the sale of Pool milk.

The total amount received for all milk sold by the Pool, less operating costs, minimum holdbacks to provide capital requirements, and adjustments for inventories owned by the Pool, should be established each month or each four-week period. This amount would be allocated between base and over-base milk. In determining the blend price for base milk, the amount allocated for over-base milk would be deducted from the total amount available for distribution, and the remainder divided by the quantity of base milk received during the period. The prices for base and over-base milk would form the starting point in computing the amount to be paid to individual producers.

In determining each member's share in the Pool, each month, the following are among the factors that would be taken into account:

- (i) the quantity of milk shipped by the member;
- (ii) the member's base;
- (iii) the official blend price;
- (iv) the content of his milk in terms of milk-fat, solids-not-fat, or such other criteria as shall be established from time to time; and
- (v) such other differentials as may be deemed necessary.

We recommend that there be no adjustment in the amount paid to individual producers in southern Ontario for the cost of transportation of milk, and that transport be treated as a Pool operating expense. We consider this to be reasonable because:

- (i) the title to milk should pass to the Pool when it is picked up at the farm;
- (ii) pooling of transport costs will result in economic pressures to bring about the most rational use of milk within the province.
- (iii) there is reasonable correlation between the location of farms producing milk and of the plants to which it should be shipped;

- (iv) we believe that the fixed costs of transporting bulk milk are more significant than has been generally recognized in the past, and that the difference in cost for long and short hauls is less than many people believe; fixed costs will become increasingly important as bulk hauling is extended;
- (v) unit transport costs would be reduced with bulk handling and better direction of milk;
- (vi) even the most complex efforts to assign transport costs to individual producers would fail to achieve much greater equity than would result from pooling;
- (vii) the cost of making adjustment for transport would be much greater than is warranted by the results that would be obtained.

(j) Financing Pool Operations

The Pool should arrange its financial affairs in ways that will keep costs as low as possible, result in equitable treatment for each member, and avoid unnecessary accumulation of funds. These objectives can be obtained without sacrificing required flexibility, financial stability, and capacity to finance growth.

Under its Charter, and because of present income tax considerations, the Pool should operate on a non-profit basis in its relationship with members. This means that each year the results of operations must be computed, and the amount owing to or due from each member must be established and full settlement made. The ideal arrangement would be to settle with each member in cash each year, but it may be necessary to arrange certificates of indebtedness, or the establishment of balances in capital accounts in order to fulfil the requirements of the law.

We suggest that the Pool would be well advised to keep its investment in capital assets to a minimum, renting facilities whenever possible. With care, the flow of cash into the Pool can be well balanced with payments, and the need for net working capital kept to a very low figure. Temporary working capital required for inventories of milk products, for example, should be financed through bank loans secured by inventories.

In many associations of this kind long-term capital is secured by deductions from amounts due to members. There are several objections to such arrangements: members must pay income tax on money they do not receive in cash, emergency needs for funds by members cannot be satisfied easily, settlement with those who withdraw from the Pool is difficult, and completely equitable treatment of those who contribute capital in this way is impractical. Various

devices are used in an effort to deal with these problems. They include revolving funds which provide that capital retired in a given year shall be that which is longest outstanding, and the issue of share certificates which are fully transferable.

During its first months of operation the Pool would probably require assistance from the government of Ontario in the form of guarantees of indebtedness, but this special need should disappear quickly.

(k) Ontario Whole Milk Producers' League

Section 23 of the Milk Industry Act states, in subsection 1:

"the producers of fluid milk or an association of producers representing them . . . in any market or in any group of markets, may by notice require . . . distributors of fluid milk . . . to bargain collectively in order to determine the prices that shall be paid to the producers supplying fluid milk to the distributors, and to describe the terms and conditions relating to the purchase and sale of the fluid milk. . . ."

The Ontario Whole Milk Producers' League is recognized as the producers' bargaining agent by Regulation 424, Section 3 of which states:

"all collective bargaining under Section 23 of the Act on behalf of the producers supplying fluid milk to any market . . . shall be by the [Ontario Whole Milk Producers' League]."

The proposals contained in this and other sections of our Report cover these and related subordinate responsibilities of the Ontario Whole Milk Producers' League. It must follow that adoption of our recommendations would eliminate the need for the League when the Pool begins to operate.

We suggest, finally, that the net assets of the League on dissolution be transferred to the Milk Producers' Pool. Producers who are currently members of the League would have clearest equity in those assets, and these producers would constitute a substantial proportion of the original Pool membership.

(l) Compensation to Holders of Fluid-Milk Quotas

Termination of the quota system presently established in Ontario fluid-milk markets has been recommended earlier in this Report. We have proposed, as substitute, a new arrangement wherein "bases" having little or no value would become possible for all producers of "A milk".

Fluid-milk quotas now have substantial, though varying, value because the holder receives higher prices for his product than he would enjoy without a quota. There have been recent reports of quota transfers at prices ranging from ten to twenty dollars per pound per day.

To the milk producer, the cost of a fluid-milk quota is an investment. Those who possess quotas have generally acquired them in one of three ways: by outright cash payments for this intangible asset; by paying more than the value of the tangible assets for cows or farms having quotas associated with them; or, through the years, by conducting their dairying activities with the skill and patience that have resulted in the slow acquisition of quotas. Whatever the method, there is an investment of capital that represents cost to the producer, increases the price for which he must sell his product, and results ultimately in higher retail prices.

Dr. Hans Mestern, Canada Department of Agriculture, has recently estimated "that the capitalization and interest charges of quotas amount to 95 cents per 100 pounds of milk, or 2.5 cents per quart". Many of the details of his computation are open to question, but the generality of his conclusion cannot be denied. As a result of the quota system the present price of fluid milk in Ontario is higher than it would be otherwise, and this condition would always prevail under this system.

(i) The Social Background

Our society, as represented by the government of Ontario, its agencies, legislation, and regulations, has encouraged and supported the present quota system and its predecessor forms for almost thirty years.

The third annual report of the Milk Control Board of Ontario, for the year ended December 31, 1936, recorded that "Toward the end of 1936 a new milk purchase plan called the '85-15 basis' began to appear in the agreements submitted to the Board for approval, and it would appear that this plan or a slightly modified similar plan would become province-wide." This "85-15 basis" provided that each producer be given a "fair shipment-quota" and a guaranteed base price for at least 85 per cent of this quota. The Board concluded that this plan brought general benefits to the producers as a whole. In its fifth annual report, for 1938, the Milk Control Board noted, with approval, further development of local quota committees, and the success with which they "are able to settle most disputes in connection with quotas and contracts".

Legislation also reflects acceptance and approval. For example, the Milk Industry Act in 1954 stipulated, Section 14 (1): "The pro-

ducers or the distributors of fluid milk in any market or any group of markets may require . . . [the other] . . . to bargain collectively . . . to prescribe the terms and conditions relating to the sale and purchase of fluid milk and to fix quotas or establish quota committees."

Regulations under the present Act reflect continued recognition of quotas. For example, Regulation 432, Section 85 (1) states: "A distributor shall give to each producer from whom fluid milk has been received a statement showing . . . where producer quotas are in effect, the number of pounds in each producer's quota."

The milk industry has embraced the quota system. Quotas (sometimes called bases) and quota committees have been and are established in nearly all fluid-milk markets. They are an integral part of the Market Agreements now operating with the approval of the Milk Industry Board.

It is reasonable to say that almost every milk producer in Ontario at this time has been influenced by the quota system in making fundamental decisions concerning his participation and investment in the milk industry. Most producers have not acquired quotas. The remainder, perhaps 10,000 fluid-milk shippers, have invested in quotas within the social and legal framework established by and for this province.

(ii) The Principle of Compensation

The general notion of compensation or recompense for those who suffer loss or injury through no fault of their own is not new.

In recent years there have been many situations in which industrial organizations and employee groups have made agreements that permit greater efficiency through mechanization and rationalization without undue burden falling on individuals. The shift to diesel locomotives meant that firemen were redundant; automation in steel-making displaced workers; new ship-loading equipment replaced stevedores. In each case progress and equity have been achieved either by revision of responsibilities or by compensation in the form of severance allowances paid in cash.

Governmental recognition of the principle of compensation is also not new. The current widening of the "Macdonald-Cartier Freeway" through Toronto has resulted in lowered property values for some citizens; economic and social benefits accruing to the community were accompanied by compensatory payments to the few who suffered, in an effort to make amends and achieve equity for all. The building of the St. Lawrence Seaway destroyed several communities; economic progress for the nation was accompanied by

compensation to those displaced. The Canadian Manufacturers' Association has reported recently that "Under Article XXVIII of the General Agreement on Tariffs and Trade (GATT), the United States is obliged to compensate its trading partners for impairments of negotiated trade concessions resulting from the introduction of its new tariff schedules on August 31, 1963."

The general principle is well stated by J. C. Weldon, Professor of Economics, McGill University, writing on the economics of social democracy in *Social Purpose for Canada*:

"If economic changes occur which in some sense are to the general benefit of society, then society should compensate persons and groups to whom the changes were substantially damaging. This is true whether the changes occur in the natural order or as the result of deliberate action by government."

Weldon emphasizes that it is unjust and unrealistic to expect individuals or particular groups to subsidize changes that benefit society more generally. He notes that "Compensated change, on the other hand, means that progress is shared and not resisted."

(iii) Compensation and Quotas

The examples cited in the preceding subsection illustrate compensated change. In each case widespread benefits are obtained without penalty to a few people. Compensation overcomes resistance to change, provides equity, and permits economic advances.

The elimination of fluid-milk quotas would result in lower costs of production, and this reduction would be reflected in lower consumer prices. At the same time, the elimination of quotas would destroy the investment that fluid-milk shippers have made in their quotas. It seems reasonable, therefore, that society assign some of these future savings to compensate those who—through no fault of their own, since they were acting within the rules established by society—would otherwise bear the principal burden of loss.

(iv) Recommendations

We recommend that the Ontario government undertake to make a compensatory payment to fluid-milk shippers holding quotas at the date that our recommended base system comes into effect, probably on the day on which the Milk Producers' Pool begins to operate.

The Government of Canada should be persuaded to participate in this undertaking. The federal government's present policy appears to be to reduce or eliminate traditional forms of aid to the milk industry, and to foster a new agriculture in which farmers will be

efficient and independent of subsidies, supports, and other aids. The elimination of the present fluid-milk quota system in Ontario would do much to encourage and assist small or marginal milk producers to enter into new activities. Others would be persuaded to establish more substantial and efficient operations. There would be action to rationalize and modernize the milk industry. These results seem likely to attract the admiration and financial support of the federal government.

Compensation to quota holders is another example of the circumstances in which the governments of Canada, Quebec, and Ontario might work together toward important achievement, and we recommend that such opportunity be recognized. However, we realize the danger of undesirable delay in coming to agreement in this important and intricate situation, and recommend that action be not deferred.

We recommend a one-time payment free of any restriction as to use by the recipient. Distribution would be made under the supervision of the Ontario Milk Commission, with due precautions in order that there be equitable settlement among quota holders.

We recommend that the unit of quota compensation be, say, \$5 per pound per day. Based on 1964 fluid sales in southern Ontario, the amount involved would be of the magnitude of \$20 million, that is, 5 per cent of the estimated retail selling price of milk and milk products in Ontario in 1963. This seems a modest price for such important benefits.

Section 3

NON-POOL MILK

- (a) Definitions
- (b) Marketing non-Pool Milk
- (c) Pricing non-Pool Milk
- (d) Position of non-Pool Shippers
- (e) The Ontario Concentrated Milk Producers' Marketing Board and Association

The marketing plan described in the preceding section of this Report recommended that all producers have complete freedom to sell "A milk" to the Pool or to any other organization with which they might contract. In this section we wish to discuss non-Pool milk and the place of non-Pool shippers.

(a) Definitions

We recommend that the following definitions be adopted:

- (i) "B milk" should be milk testing Grades 1 or 2 on the Resazurin reduction test, Regulation 432, that has been produced on premises that are *not* in compliance with that or successor Regulations.
- (ii) "C milk" should be any milk testing *below* Grades 1 and 2 on the Resazurin reduction test, Regulation 432, that meets standards for manufacturing into products for human consumption as these standards shall be established from time to time.

In general terms, "C milk" would be handled separately from other milk and with extra cost to the producer. The bulk handling of "C milk" would entail a number of difficulties, but most of these would be neither new nor insurmountable. The very substantial improvement in the quality of milk produced in this province in recent years suggests that "C milk" will soon be a very small part of total production. However, even under the best possible conditions, some producers will encounter occasional diffi-

culty and low-quality milk will result. Among the objectives to be adopted by the industry should be the avoidance of quality problems, and after that, the early detection and effective handling of those troublesome situations.

(b) Marketing non-Pool Milk

Non-Pool milk would include some "A milk", all "B milk", and all "C milk". We suggest that those who produce "B milk" and "C milk" should have full freedom to sell, individually or collectively, to anyone with whom contracts can be arranged, except fluid-milk plants. This must be subject, of course, to the quality standards determined from time to time by the Ontario Milk Commission, the Ontario Department of Agriculture, and other authorities.

Non-Pool shippers could ship in bulk or in cans. They could make any contracts that appeared to be suitable for the transport of their product and pay the necessary costs. These shippers would be paid by the purchasers of their milk, and the Pool would not be involved in any way.

In our opinion, this arrangement for the marketing of non-Pool milk would bring substantial and necessary flexibility to the industry. It would preserve the right of producers to operate manufacturing plants on a co-operative basis, to deal with joint-stock cheese factories, to bargain individually or collectively for terms and conditions attaching to the sale of their milk, and, in general, to make and change marketing arrangements in any way that appeared to be in their best interests.

(c) Pricing non-Pool Milk

As at present, the price of non-Pool milk will be strongly influenced by the subsidies and support prices established from time to time by the federal government. However, the policies of the central government have not been the only determinants of the price of milk for manufacturing purposes. In recent years competition between plants seeking milk for manufacturing uses has very often resulted in prices higher than those that reflect federal policies or the minimum prices negotiated by the Ontario Concentrated Milk Producers' Marketing Board. At present the Agreement under the Ontario Concentrated Milk Producers' Marketing-for-Processing Plan and Regulations provides for a 10c difference between the price for milk of Grades 1 or 2 and milk lower than Grade 2. Some manufacturers are paying a much larger premium.

Some of these premiums are the result of favourable geographical location. More important is the manufacturers' desire to secure milk of better than minimum quality because fewer plant

operating problems are encountered, and the products are more likely to bring premium prices. Also, the purchaser finds himself with a larger measure of control over the producer in that the premium places him in a better position to refuse to accept milk of marginal or low quality. Finally, manufacturers have displayed a determination to establish relationships with producers that will result in predictable volume and the assured supply necessary for efficient operation.

We anticipate that many manufacturing plants would continue to be willing to pay a premium for milk of better than minimum standards, that is, for "B milk" as opposed to "C milk" and for "A milk" as opposed to "B milk". Moreover, it seems likely that some plants would prefer to buy from the Pool rather than from individual producers, although the Pool price would probably be a little higher. Plant operators should be willing to pay this premium for several reasons. They would be dealing with one organization, the Pool, rather than with a number of individual shippers, and this should facilitate settlement of quality disputes and eliminate other costly relationships. The Pool would provide an attractive guarantee of quality and would assure supply under a meaningful contract. Settlement with the Pool would be much easier and much less expensive than the multitude of settlements required when dealing with many producers.

If manufacturing plants were unable or unwilling to pay enough for "B milk" and "C milk" to ensure a satisfactory return to the producer, the producers would tend to go out of production or to produce "A milk" and market it through the Pool. This would bring greater bargaining power into producer hands, and, if used intelligently, would lead to stability and progress for the industry as a whole.

(d) Position of non-Pool Shippers

Many factors would influence the individual producer in deciding whether or not he would join the Pool. He would consider, for example:

- (i) the cost of coming into compliance, if he has not yet done so;
- (ii) the cost of converting to bulk operations, if this should be necessary;
- (iii) the difference between the current net price for non-Pool milk and for Pool milk;
- (iv) his willingness to produce milk on a year-round basis, although this should not be a condition of Pool membership;

- (v) regulations concerning entering and leaving the Pool;
- (vi) his inclination to continue to ship to a co-operative or to maintain other established relationships;
- (vii) his general intentions and expectations with respect to the milk industry.

We would expect that a great many milk producers would not become Pool members at the beginning for one or more of these suggested reasons. As time goes on, we would also expect that the demonstrated advantages of Pool membership would persuade many to join, and that the Pool would grow in strength. Moreover, as the industry moves toward one quality of milk and the number of purchasers of milk declines, the importance of collective bargaining should become more apparent.

No doubt some producers would continue to market their milk outside the Pool with economic advantage or psychological satisfaction, and perhaps both. We do not urge that all producers should join the Pool, and we have not recommended that the Pool should control the marketing of all milk, because of the dangers of such a degree of monopoly and the regimentation associated with it. We believe that our recommendations would result in a reasonable balance of forces.

(e) The Ontario Concentrated Milk Producers' Marketing Board and Association

There are two Concentrated Milk Producer organizations. They can be referred to conveniently as the "Board" and the "Association". It is desirable to discuss each of these briefly in order to support the recommendations contained in this subsection of our Report.

(i) The Ontario Concentrated Milk Producers' Marketing Board appears to have been established in 1954 for the purpose of implementing a Marketing-for-Processing plan. It has authority to regulate and control the marketing locally within Ontario of milk produced in Ontario and delivered to a plant for manufacture into concentrated milk products. Concentrated milk products exclude cheese and creamery butter made from cream delivered to a plant. Under the plan there is provision for a negotiating agency to adopt or settle by agreement minimum prices for milk, terms and conditions of agreement, and other charges for expenses. This Board is also empowered to stimulate, increase, and improve the marketing of milk by such means as it deems proper, and to use its resources for such purposes as The Milk Producers' Co-ordinating Board recommends. The Milk Industry Act, Section 4 (5), gives power to the Co-ordinating Board "to provide facilities for the handling of any phase of the marketing of milk" and many other things.

The foregoing provisions would suggest that the Ontario Concentrated Milk Producers' Marketing Board had very great powers. In fact, the Board's activities have been limited by various factors including the national and international nature of the market for concentrated milk products. They have included negotiation of minimum prices for milk used for manufacturing purposes under several categories, the provision of some field service to producers, and little more. The arrangement of transport charges has been handled at the local level.

In recent years, prices paid by many manufacturing plants have exceeded the minima established through negotiation. Also, developments within the industry have resulted in an increasing flow of milk into manufacturing uses by way of fluid-milk establishments. There has been no representation on the Concentrated Board of those who produced this milk, although amounts have been paid by the Ontario Whole Milk Producers' League on a basis of estimated licence fees. Several categories of manufacturing milk have been identified in negotiating agreements for manufacturing milk, and with the growing complexity of manufacturing plants, blend prices have resulted. As a result, the observance of the terms negotiated by the Board under the agreements is not easily verified.

In recent years, the Board, in co-operation with other producer organizations, has made serious efforts to establish an over-all milk marketing plan in order that its members might have full freedom of access to the fluid-milk market. We have proposed an over-all marketing plan that would provide this freedom of access.

In view of all of the foregoing, and because our recommendations contained in this Report would cover present activities of the Board, we recommend that it should cease to exist with the beginning of operations by the Milk Producers' Pool.

(ii) The Ontario Concentrated Milk Producers' Association is said to have been formed in 1934 on a voluntary basis. It was incorporated in 1954 under the Ontario Corporations Act without purpose of gain. It is not subject to the Milk Industry Board nor would it come under the control of the Ontario Milk Commission. The objectives of the Association as set down in its Letters Patent include the organization of local groups of concentrated-milk producers and assistance for them in their relationships with local plants, including collective bargaining to establish prices. The Association has complex By-Laws which provide for representation of local groups on the Board of Directors, collection of fees by the Association, and support of local activities by refund of part of these fees. The Association has been inactive for many years, but it holds liquid assets having value of about \$150,000.

Through the years there has been some confusion between the Association and the Board. This has arisen in part because the objectives of the two are similar (though not identical), and in part because the Board of Directors and officers of the two organizations are very nearly, but not quite, the same. Because of the terms of the legislation that established the Board, some of the practices and arrangements followed by the Association have been adopted by the Board, and this too has given rise to some duplication and confusion.

It is our understanding that the Association has been kept alive through the years in order that there might be an organization and assets available to concentrated-milk producers in the event that the Board and the associated Marketing-for-Processing plan should be discontinued. In addition, there appears to be a belief that the Association would permit concentrated-milk producers to use Association assets for purposes that the Board might not be permitted to undertake—for example, the purchase and sale of powdered milk—although this has not been done.

We believe that the producers of non-Pool milk would be in a favourable bargaining position. We have already supported this statement at some length. In brief, the bargaining power of the Pool would result in satisfactory agreements with major manufacturers, and influence the price of all milk. Non-Pool shippers would have full freedom of access to the Pool. Most of them would have the ability to sell their milk directly to competing manufacturing establishments. All would be free to establish co-operative undertakings should these appear to be desirable. The Ontario Concentrated Milk Producers' Association, with its existing powers and resources, would provide additional support for non-Pool shippers if this should prove to be necessary.

We recommend that the Ontario Concentrated Milk Producers' Association continue to exist with its present objectives, which are essentially to organize and support local groups of producers shipping to manufacturing plants, and to help them share their experiences, bargain collectively, and operate efficiently. We believe that many of the By-Laws of the Association would be inappropriate to the new circumstances and that they should be reviewed carefully.

The Association should not feel that it must attempt to take the place of the present Board. The experiences of other producers in similar positions—for example, the State of Michigan—suggest that there may be no need for an Association. In any event, it should be clearly recognized from the beginning that non-Pool shippers are in a very different position from the present members of the Ontario Concentrated Milk Producers' Marketing Board in that they have full access to the fluid-milk market and the very substantial protection afforded by the Pool.

Section 4

CHEESE PRODUCTION AND MARKETING

- (a) General
- (b) The Ontario Cheese Producers' Marketing Board and The Ontario Cheese Producers' Co-operative Limited
- (c) Pricing of Cheese
- (d) The Future of the Cheese Industry
- (e) Management of the Board and the Co-operative
- (f) Recommendations.

In this section we deal only with cheese produced from whole milk, namely, cheddar cheese, whether raw-milk, heat-treated, or pasteurized, and a growing variety of specialty cheeses. The differences between raw-milk, heat-treated, and pasteurized cheese are, first, the temperature to which the milk is heated prior to processing and, second, the way in which the finished product develops. Those familiar with the industry state that properly cured raw-milk cheddar cheese will develop the unique tang associated with good Canadian cheese, properly aged, whereas this flavour will not develop in heat-treated or pasteurized cheese. Much cheddar cheese is converted into what is known as processed cheese.

This section does not deal with cottage cheese and skim-milk cheese, which are essentially manufacturing by-products.

Whole-milk cheese has been produced in Ontario from the time of the earliest settlement. Through the years the volume of cheese produced in this province has fluctuated greatly. In 1963 some 73.8 million pounds of cheddar cheese was produced, representing the utilization of approximately 811 million pounds of milk, or 12.4 per cent of the raw milk produced in Ontario. In the same year, about 8.9 million pounds of specialty cheese was manufactured in Ontario factories, utilizing about 98 million pounds or 1.5 per cent of Ontario's raw-milk supply.

(a) General

Tables 15 and 16 in Part D, Section 5 indicate the volume of whole-milk cheese produced in this province over the years and the magnitude of Canadian exports.

In terms of total volume, and in relative importance within the milk industry itself and agriculture generally, cheese production in Ontario was much more important sixty years ago because of the substantial export market in the United Kingdom. Production of raw-milk cheese grew rapidly in the last decade of the nineteenth century. By 1900 there were about 1,200 cheese factories scattered across southern Ontario. Nearly all of them were quite small, and a large number of them were run on a co-operative basis by farmers who lived within a few miles of them.

During the intervening years there have been many changes but there is no need to trace these events in detail. At the present time cheese factories are owned and operated on four different bases:

(i) Privately Owned

These factories are owned by individuals. In some, milk is purchased outright; in others milk producers retain title to the cheese manufactured and arrange settlement among themselves on a co-operative basis. In this latter situation the owner of the factory operates on a fee basis.

(ii) Joint-Stock

So-called joint-stock factories, owned by incorporated companies most of whose stockholders are cheese-milk producers, are, in effect, co-operative ventures. These factories also buy small quantities of milk from producers who are not stockholders.

(iii) Other Co-operatives

Essentially these are unincorporated factories operated on a co-operative basis by cheese-milk producers. These factories buy some milk from non-members.

(iv) Corporations

Five large corporations buy milk for processing into cheddar cheese.

In the early co-operatives the farmer's return was determined entirely by the price received for the finished product, and was not established until all the cheese manufactured had been sold. By 1963, only 53 per cent of the cheese produced in Ontario was manufactured

on a co-operative basis—that is, was owned by the producers of the milk that went into manufacture. (See Part D, Section 5, Table 17.) This percentage has decreased significantly in recent years, and current developments are such that it will continue to decrease. This observation should be noted carefully because under present legislation the control of the Ontario Cheese Producers' Marketing Board is vested in those who are described as cheese producers, i.e., those who own the cheese at the time it is manufactured. Because of the decreasing importance of the co-operative basis the role of such producers in the marketing of cheese must be reconsidered.

As with all other milk products, the quality of cheese depends to a very large degree on the quality of the milk from which it is made, and the treatment of milk within the plant is also significant. For many years the Ontario Department of Agriculture has been keenly interested in the way in which plant activities have been conducted, and it has made important contributions through instructors made available to cheese plants. There appears to have been relatively little effective action to improve the quality of cheese milk until recently. It is clear that those factories producing high-scoring cheese and receiving the premiums of 1 and 2 cents per pound offered by the federal government are those in which there is careful assessment of the quality of the milk accepted by the plant, and standardization of manufacturing procedures.

Raw-milk cheddar cheese is very important, and much has been said in praise of its unique qualities. Cheese of this kind is produced in few other places in the world. In recent years there have been new efforts to compete with Ontario raw-milk cheese in Ireland, Holland, and Quebec, but production of long-aged cheddar cheese of good quality is not easy, and the combination of long experience, careful controls, and high standards to be found in Ontario has been most important in our ability to maintain leadership in this segment of the industry.

The manufacture of raw-milk cheddar cheese seems to be best undertaken in relatively small plants. Past experience in Ontario indicates that the cheesemaker must be able to directly supervise the work of all those concerned with the inside operation of the plant, and this means that few plants have more than a dozen employees. Methods used in manufacturing raw-milk cheese have changed somewhat through the years; for example, power is now used for agitation and curd sinks have been introduced. Also, there have been important improvements in the design and the safety of the machinery. Although the physical effort required to move the manufactured cheese has been greatly reduced through the use of lift trucks and other mechanical equipment, a great deal of heavy physical labour is still required at certain stages in the operation.

Heat-treated and pasteurized cheddar cheese is also made in many small plants under the conditions just described. However, there have been several successful efforts to establish large-scale operations, and to reduce the total operation to a semi-mechanical activity. Two good examples of this success are at Casselman and St. Isidore. However, these plants are quite small when compared to the Bon Conseil plant operated by Coopérative Agricole de Granby, Québec, and Bongards' Creameries in Minnesota. Each of them is perhaps ten times as large as the Ontario plants just noted.

After 1945 there was a rapidly growing demand for variety cheeses which are available on world markets, and in the beginning these were imported. Gradually, small factories began to appear, very often operated by immigrants who had gained the necessary experience in other lands. Ontario specialty cheese producers meet strong foreign competition, and they are handicapped in that costs in this country are relatively high. Also, people interested in unusual types of cheese are very often inclined to buy the imported products, particularly when they are priced attractively. Most specialty cheese plants in Ontario continue to be small.

Cheddar cheese, whether for domestic use or for export, is marketed under the general control of The Ontario Cheese Producers' Marketing Board. Specialty cheeses are usually sold directly by the manufacturer to the retailer. In recent years brand names have played an increasingly important part in domestic marketing. Some of the brand names associated with cheddar cheese are now displayed in the United Kingdom.

**(b) The Ontario Cheese Producers' Marketing Board and
The Ontario Cheese Producers' Co-operative Limited**

These two organizations have been basic in the marketing of cheddar cheese. Because we have important recommendations concerning these organizations, we outline at considerable length the nature of their operations.

(i) The Board

For over twenty-five years there has been a Cheese Marketing Plan in Ontario, and since 1955 this has been the responsibility of The Ontario Cheese Producers' Marketing Board. The Board is established under Regulation 423 of the Milk Industry Act, and empowered to regulate and control the marketing of cheese locally within Ontario. "Cheese" is defined to include "cheese of every variety produced in Ontario", and a "producer of cheese" is "the person who owns the cheese at the time the cheese is manufactured".

The structure of this cheese producers' organization provides for six districts, each comprising a varying number of counties.

There is provision for a "county association of cheese producers" in each county, and each of these associations elects a minimum of five members to the "District Cheese Producers' Committee". A county association may elect an additional member to the District Committee for each million pounds of cheese produced in excess of 4.5 millions. Each county association elects a county president.

Each District Committee elects one member to The Ontario Cheese Producers' Marketing Board for a three-year term, with the terms of office being staggered so that in any one year Board members are elected from only two districts. Each year the six Board members so elected appoint a seventh member known as the member-at-large. The seven members then elect a chairman and vice-chairman from among their number.

The Chairman of the Board is Mr. Hector C. Arnold of Campbellford, who has held this position for the past nine years. The Vice-Chairman, Mr. Robert J. Kelso of Roebuck, and two other Board members have had the same tenure.

Regulation 422 sets out rules and regulations for the operation of the marketing plan, and the powers delegated to The Ontario Cheese Producers' Marketing Board. A summary will be found as Part D, Section 6, Exhibit VI.

The Board plays an important role in the marketing of cheddar cheese. It conducts two cheese exchanges, collects proceeds from sales of cheese from buyers, and disburses proceeds to the cheese factories. It operates warehouses for the grading, weighing, and storing of cheese. Through its wholly-owned subsidiary, The Ontario Cheese Producers' Co-operative Limited, the Board acts as a cheese buyer and exporter and controls the sale of Ontario cheese to the United Kingdom, the only major export market for the product. The Co-operative is the dominant buyer of Ontario cheese, and in recent years has set cheese prices on the exchanges; thus, provisions of the marketing plan relating to negotiation and arbitration are not invoked. The Board also performs a variety of services for producers and cheese factories, many of which are producer-owned, such as bulk purchasing of cheese packing materials, providing income tax services, and serving as an effective lobbying group.

In addition to the head office and warehouse at Belleville, the Board operates two plants for the grading and warehousing of cheese at Winchester and Oxford Station, and a small warehouse at Plantagenet, all in eastern Ontario.

The original warehouse at Belleville was constructed in 1951. Including a recently completed extension, this warehouse has a

storage capacity of about 80,000 boxes (7,200,000 pounds of cheese). The second major warehouse operated by the Board was constructed at Winchester in 1955 with estimated storage capacity of 55,000 boxes.

In 1963 the Board purchased additional facilities at two locations. At Oxford Station it acquired a frame building located on land owned by the Canadian Pacific Railway, a converted barn, an old cheese factory, and a small, relatively new, metal-clad building. Each is located on a small piece of land, quite separate from the others, and is used for storage of cheese. The total storage capacity is about 20,000 boxes. At Plantagenet the Board purchased a concrete-block warehouse with storage space for 6,000 boxes.

All of the Board's accounting activity is performed at the head office in Belleville. Monthly financial statements are prepared for the summer months by the Board's auditors. They also produce statements for the fiscal year just before the annual meeting in January.

The general operations of the Board are financed through a 1/10c per pound licence fee, and revenue from warehouse operations which comprise a number of storage and handling charges, with other revenue arising from cartage, waxing, and miscellaneous services.

(ii) The Co-operative

The Ontario Cheese Producers' Co-operative Limited is a wholly-owned subsidiary of the Marketing Board. Its primary function since 1956 has been to buy and sell cheese. It appears that this arrangement is intended to permit the cheese producers of Ontario to achieve orderly fulfilment of the United Kingdom demand for raw-milk cheddar cheese, and to eliminate undesirable or frequent fluctuations in price. In 1963 the Co-operative purchased 24.9 million pounds, or 34 per cent of the 73.3 million pounds of cheddar cheese on which licence fees were collected. The bulk of its purchases was from summer production.

The Board, through the Co-operative, has handled nearly all Ontario raw-milk cheddar cheese exported to the United Kingdom in recent years. In so doing, a two-price system has been maintained, in that cheese is sold to the United Kingdom at a lower price than that prevailing on the domestic market. In 1964 the Exchange or domestic price for grass cheese was 38c per pound for large rounds, while the price for export to the United Kingdom, f.a.s. Montreal, was 35c per pound. The difference between the domestic and export prices is a 2c federal export subsidy and a 2c subsidy provided by the Co-operative from the producer levy, less 1c, the shipping costs to Montreal.

The federal export subsidy is payable on all raw-milk cheddar cheese exported from Canada; it has been reduced by 1c per pound during each of the last two years. The Co-operative subsidy is possible because of a levy of 9/10c per pound on all cheddar cheese produced in Ontario, and is authorized under federal legislation. The ability of the Co-operative to contribute 2c in support of the export price makes it difficult for private buyers to compete with the Board in the export market.

The Co-operative purchases cheese on the exchanges in an effort to fulfil so-called "orders" received from British importers. The orders are not confirmed commitments, but are verbal expressions of intent by the representatives of the United Kingdom importers. They cover first-grade raw-milk cheese only, primarily grass cheese, which is guaranteed against deterioration for a period of one year. The Chairman of the Co-operative, Mr. Hector Arnold, has explained to us that because of this guarantee, orders are not taken from organizations that are, in his opinion, not capable of handling the cheese properly. In fact, purchases by the Co-operative are followed by cable offers to these United Kingdom customers, and acceptances with shipping instructions are normally received the following day. In order to stabilize market price, the Co-operative also purchases cheese that is later sold on the domestic market.

(iii) Exchanges

The marketing plan provides that all cheese produced in that part of Ontario in which the plan is in force must be sold through a cheese exchange. However, the plan permits the Board to make exemptions, and in practice, specialty cheeses not considered to be standard Ontario cheddar are exempted from the payment of licence fees. In addition, a substantial quantity of Ontario cheddar cheese (12.8 million pounds in 1963) is not sold on the Exchange but the Board collects licence fees thereon.

Belleville Exchange

So-called auctions are held weekly at the Belleville Exchange from May through November, and every two weeks during the remainder of the year. The "Dutch clock" method of sale is used, and normally five or six buyers, including the Co-operative, participate. Cheese is sold on the basis of test weighing and test grading, f.o.b. the warehouse in which it is stored.

Normally, cheese is held at the factory for ten days and is then removed to a grading station or warehouse where it must remain until a total of twenty-one days has elapsed from the day of production. Ten per cent of the cheese in a lot is weighed and one

cheese from each vat is graded by federal government inspectors who, by subjective methods, judge the flavour and texture. Documents relating to the lots of cheese are then processed by the Board and a catalogue of lots is prepared and distributed to buyers and other interested parties the night before the Belleville auction.

We were informed by the Chairman that he, in consultation with others, determines the price to be paid for cheese on the Belleville Exchange. This statement was confirmed by the Secretary-Manager. This is possible because with its financial resources and the magnitude of its export operations, the Co-operative is the dominant buyer. At the beginning of each auction, the Secretary of the Board, who buys for the Co-operative, informally advises the other buyers of the established price for the day; as a result the "Dutch auction" is of limited significance. Because of the buying strength of the Co-operative, and the fact that there is only a certain quantity of cheese available in any given year, it appears that the other buyers are prepared to divide the cheese among them at the minimum price established by the Chairman for first-grade cheese. Individual transactions reflect only minor variations from the established price. The prices of second- and third-grade cheese follow those established for first-grade cheese, but the quantities are quite small.

A considerable number of the one hundred factories selling cheese through the Exchange have an informal agreement with specific buyers. These agreements are respected by other buyers, including the Co-operative, during the course of the auction. In fact, most buyers buy by factory.

The general strategy has been for the Co-operative to maintain the price set for grass cheese until the last of it is sold in late autumn and then to re-establish it in spring when grass cheese again becomes available. These arrangements have worked quite smoothly for the most part. A notable exception was on May 13, 1964, when the buyers were evidently willing to oppose the pricing policy established by the Co-operative and purchased cheese at a price higher than that which had been determined for the day.

Stratford Exchange

The Stratford Cheese Exchange is held every second week in the Stratford City Hall. Cheese is sold, before being graded, as first-grade, and a fixed price adjustment is made if the cheese is subsequently graded lower. Prior to the "auction", the cheese factory representatives register the quantity and colour of cheese to be offered. The western counties produce about one-sixth of Ontario's cheddar cheese. About twelve factories regularly sell cheese through this Exchange.

Normally there are six buyers—the Co-operative, Swift Canadian Co. Ltd., Pet Milk Canada Limited, J. M. Schneider Limited, Ingersoll Cheese Co. Ltd., and the Oxford Farmers' Co-operative Produce Co. Ltd. The same buyers tend to buy from the same factories at each auction. Nevertheless, we were informed that a ritual of bidding takes place covering the entire quantity of cheese offered, with the "winning" bidder getting first selection of lots offered. Other bidders, in turn, are given the opportunity to select the lots in which they are interested.

The Co-operative sets the price of cheese on the Stratford Exchange at 1c per pound less than the Belleville price, and announces the price to the buyers at the beginning of the session. The explanation given for the difference in price is that the purchaser, rather than the seller, must bear costs associated with grading and handling.

(c) Pricing of Cheese

The pricing of cheese has been of deep concern to many of those who spoke to the Committee. There are two aspects: first, the way in which prices are established, and second, the level at which they are maintained.

The Chairman informed us that in 1963 and 1964 the summer price on the Exchange was established by reference to the level at which he had agreed to make Ontario cheese available in Montreal for export. He explained that each spring he and the Secretary travelled to the United Kingdom, held discussions with a limited number of probable buyers to get the "feel of the market", and then, by a process of "common sense", established the price. It is noteworthy that in both 1963 and 1964 the price established for the United Kingdom was increased by 1c per pound, which is precisely equivalent to the reduction in the export subsidy in each year.

The Chairman and others have emphasized the very great importance of stable pricing and predictable supply of quality product in order to maintain or expand the British market. We have discussed these matters with many competent and knowledgeable individuals, including more than a dozen United Kingdom importers, and are satisfied that a great deal of emphasis must be placed on each of these factors. Nevertheless, the fact that the price for Ontario cheese in the British market has remained unchanged for a year at a time has been widely questioned. It has been suggested that this is an unrealistic arrangement in that it is impossible to fix an appropriate price for so long a time. For example, during the last year it has been said that there has been a significant unsatisfied demand for Canadian raw-milk cheese, and that no fundamental damage would have been done to the United Kingdom market if the

price had advanced a cent or two per pound during the season in recognition of the excess of demand over supply. We have been told that in the spring discussions with United Kingdom importers there had been recognition of the possibility of an increase in price during the season.

Discussions with the Chairman of The Ontario Cheese Producers' Marketing Board revealed his strong opposition to mid-season price adjustments. He has expressed the belief that it would be unfair to charge a variety of prices during a given season. He has gone so far as to suggest that if the price were increased during the season, and if the Board found it necessary to reduce the price later, there should, in all fairness, be an adjustment for those who bought at the higher price so they could compete on equal terms.

There are said to be important arguments for refraining from what must appear to many to be a reasonable inclination to maximize returns for cheese-milk producers and manufacturers. It is important to remember the significant price differential between Ontario raw-milk cheese and the heat-treated cheese imported into the United Kingdom in very substantial quantities from New Zealand and Australia, and that Ontario cheese is a somewhat specialized and perhaps a luxury product on the British market. One importer, discussing cheese not pre-packaged or sold under a brand name, expressed the belief that it would be difficult to raise the price of Ontario cheese to a point where it would have to be sold for more than 4 shillings (60c) per pound at retail level. We have also been reminded of the recent determination of cheese producers in Quebec, Ireland, and Holland to replace Ontario cheese, and of the considerable ability of the British Milk Marketing Board to direct milk into production of similar British products.

We believe that there are British cheese importers with substantial experience who would be willing to buy more of the product if they had an opportunity to do so. They frequently buy Ontario raw-milk cheese from other importers who are presently able to obtain a part of the available supply at a price that presumably provides a satisfactory margin of profit to both parties. We have come to believe that there is limited competition between British cheese importers, and that they are quite able to arrange for the ultimate disposition of the limited volume of Canadian cheddar cheese that becomes available, in a fashion generally satisfactory to their best interests as a group of importers.

We have also come to the conclusion that Ontario raw-milk cheese could have been sold this year for United Kingdom consumption for at least 1c per pound over the price received. This has been indicated by British importers, and indeed by the Chairman of The

Ontario Cheese Producers' Marketing Board. In 1964, some raw-milk cheddar cheese made in Quebec was sold for export to the United Kingdom for 2c per pound more than Ontario cheese. This does not often happen. We believe that there is opportunity for gradual increase in both price and quantity in the United Kingdom market.

The domestic price for grass cheese reached 38c in September 1962 and remained at this level during 1963 and 1964. This pricing policy seems very strange in view of the much-talked-of unsatisfied demand for Ontario cheese in the United Kingdom.

(d) The Future of the Cheese Industry

Before presenting our recommendations, it appears desirable to give some serious attention to the probable course of events during the next few years. We do not pretend to have special predictive powers, but believe that our examination of recent trends and present circumstances may be of use in attempting to look into the future.

(i) Supply

The production of raw-milk cheddar cheese has already been discussed and we have noted the difficulties of expanding production. There appear to be many reasons to assume that no important expansion of raw-milk production will take place in Ontario in the foreseeable future. The reasons include the shortage of cheesemakers, the unwillingness of young people to undertake the heavy physical effort associated with production, the long hours per day, the seven-day week, the seasonal unemployment that appears to be inevitable, the difficulty of more extensive use of mechanical equipment, the conduct of manufacturing operations in small units, the limited lifetime of many existing buildings and the equipment contained in them, and the unwillingness of most people to invest capital under the present circumstances.

On the other hand there are some reasons to be more optimistic. Improved quality in milk and greater understanding of production problems through research might eliminate some of the handicaps just mentioned. A higher price for raw-milk cheese would encourage the building of new factories and installation of modern equipment, and permit higher salaries and wages to those engaged in what is unattractive employment by present-day standards. It is our opinion that the demand for raw-milk cheese on both the domestic and the United Kingdom market could be increased, and this would tend to support higher prices for what is likely to be a limited supply of a unique product for many years to come.

Heat-treated and pasteurized cheese can be produced in plants

of much greater capacity than any to be found in this province at this time, and greater mechanization is possible. While production of such cheese can easily be increased in this province, it is equally easy to expand productive capacity in other provinces and in other parts of the world. Manufacturers of pasteurized cheese in New Zealand, for example, have many advantages, such as year-round pasture and lack of need for expensive stabling. In Quebec, Minnesota, New Zealand, and Australia, there are very substantial plants presently in operation which are likely to produce cheese for many years to come. Ontario manufacturers must recognize these factors when contemplating increased production.

Good heat-treated or pasteurized cheddar cheese, properly stored and aged, would be accepted by many Canadian consumers as a substitute for mild raw-milk cheddar cheese. If there is an insufficient supply of raw-milk cheddar cheese for domestic and export markets, it seems to us that a greater portion could be diverted to export, and replaced in the domestic market by high-quality heat-treated or pasteurized cheese.

Specialty cheeses have only recently come into prominence in Ontario. We have been led to believe that many of the people who have undertaken such production are well qualified for the task, and that they may look forward to increasing success. We have been told by those whose opinion we must respect that much of the specialty cheese made in Ontario is of excellent quality and can compete with similar products made in foreign countries. We were told further that local producers have several advantages in that their product need not be moved long distances and incur the deterioration which must be associated with extensive travel and passage of time.

Much of this specialty cheese is produced in small quantities in a substantial number of relatively unimportant and ill-equipped plants. Many of the plants currently in use were once designed for cheddar cheese production. They are old, poorly laid out, inflexible, and otherwise unattractive and inefficient.

(ii) Demand

The demand for Ontario cheese must be divided into the domestic—i.e., the Canadian—market, and the export market.

It is our opinion that the domestic market for cheese of all types, particularly raw-milk and specialty varieties, can be greatly extended. We are persuaded that many people have not thought seriously of cheese, and that the time has come when imaginative promotion would be well received. It appears also that there is a growing demand as a result of the arrival of so many newcomers

of European origin to this country in recent years. These people appreciate good cheese with varied characteristics.

We believe that, in general, Ontario cheddar cheese is not well promoted in Canada, and that there are important opportunities to extend the domestic market. Here are a few suggestions:

Encourage restaurants to buy good cheese, store it properly, and make it readily available.

Establish cheese as a standard dessert; at the present time it is usually an à la carte item, at extra cost; a generous serving costs the restaurateur less than most pies.

Serve a variety of domestic cheeses with butter and assorted biscuits and fresh breads.

Persuade the Department of Travel and Publicity to include it as one of the attractions for visitors to Ontario.

At the present time the only significant export market for Ontario cheese is that for raw-milk cheddar in the United Kingdom, where it must compete with similar cheese made elsewhere. In 1963 The Ontario Cheese Producers' Co-operative Limited sold over 22 million pounds of cheddar cheese to twenty-three importers in the United Kingdom. The major importer purchased 27 per cent of the total; the five largest importers purchased 77 per cent of the total, and the ten largest of the twenty-three bought 91 per cent of the total quantity exported.

We have been told that most of those importers who received cheese in 1963 would have been willing to purchase more than was allocated to them by the Co-operative. We have also heard that at least ten other importing firms in Great Britain would have been willing to buy Ontario cheddar cheese during the same period but were not supplied. One of the minor importers, under date of July 8, 1964, offered through his Canadian agent to purchase cheese at $1\frac{1}{2}$ per pound in excess of the price at which cheese was being made available for export by the Co-operative at that same time.

We have attempted to reconcile this unsatisfied demand for Ontario cheese in the United Kingdom market with the pricing policy established by the Board and the Co-operative, and with the ability of Ontario cheddar cheese manufacturers to produce increased quantities in excess of the domestic demand. We are convinced that the demand for cheese at the present price is not as great as the sum of the demands indicated by individual importers and would-be importers. This is evidenced by sales by one importer to another, which may indicate that some are able to secure more than they are able to market through other trade channels.

The general policy of the Board and the Co-operative has been to continue to do business from year to year with those having established relationships. The Board has refused many requests from other importers, presumably because the available supply of cheese could be sold through established outlets. This policy has been defended with the suggestion that cheese is difficult to handle, that the Board's guarantee of satisfaction must be protected, and that there is no need to undertake new risks in selling to untried and unknown importers. Little serious attention appears to have been given to the advances made by United Kingdom chain store organizations, their rapid development, and the probability that they will come quickly to dominate the retailing of food products as do their counterparts in this country.

The obvious export market for which to strive is in the United States of America. In 1963 Canada was permitted to export 500,000 pounds, and this has recently been increased to 600,000 pounds per annum. There is no doubt that substantial quantities of this raw-milk product could be sold at a good price if the present quota could be increased, or all restrictions eliminated. The new dairy regulations established for the European Common Market effective November 1, 1964 should be studied carefully in the hope of establishing a new and potentially extensive market.

The export market for heat-treated, pasteurized, and specialty cheeses does not seem to offer important prospects. There is a growing surplus of milk for manufacturing in many countries, and cheese is one of the obvious ways in which to dispose of the solids content. Under price support operation in the United States, 192.6 million pounds of cheese was given away in 1962-63.

Costs of cheese production in many countries are lower than those in Canada. Many nations provide even heavier subsidization of exports, and greater encouragement of large-scale operations and high-quality products than does Canada. Canadians cannot reasonably hope to achieve important new markets for heat-treated and pasteurized cheese without greater support from government, or extension of the two-price system to these products.

(e) Management of the Board and the Co-operative

The Board and the Co-operative are essentially one organization. The Chairman of each is Mr. Hector C. Arnold, and the directors of the two are identical. Mr. J. Arnold Johnston is described as the Secretary-Manager of each organization.

On a great many occasions, both at public hearings and less formally, many of those most interested in the milk industry have voiced their opposition to Board policy and their serious concern as

to the manner in which policies are formulated, decisions made, and control established.

Our study of the Board's affairs has led us to conclude that they are dominated by one man, and that there is serious lack of objective recognition of the economic implications of many acts such as price setting, allocation of available supplies of cheese, and acquisition of warehouse facilities.

Following is a lengthy factual statement of some aspects of the Board's behaviour in recent years, and our criticism of them. Careful analysis of the Board's operations discloses beyond any doubt that the administrative practices employed could be much improved.

(i) Extension to the Belleville Warehouse

The extension to the Belleville warehouse, completed in 1964 at a cost of more than \$135,000, was undertaken without calling for tenders.

This extension, originally contemplated in 1961, has been the subject of considerable discussion and uncertainty because of the way in which the contracts were let.

We have reviewed the circumstances surrounding this undertaking and wish to set down as clearly as we can the sequence of events.

On October 5, 1961, Finley W. McLachlan Limited, General Contractors, Toronto, wrote to the Board:

"We have pleasure in confirming our budget proposals . . . in conformance with the sketch plans and outline specification left with Mr. Wilde, for supplying of all necessary labour, materials and plant equipment . . ."

There were two alternative undertakings. One proposal included the equipment to make possible the storage of butter, the other did not. The prices quoted were \$264,328 and \$236,737. Under each alternative, the building was to be of *steel beam construction*, and prices included refrigeration equipment and office space. A copy of the McLachlan proposal is included as Part D, Section 6, Exhibit IV.

The minutes of a regular meeting of The Ontario Cheese Producers' Marketing Board, dated October 5 and 6, 1961, include Item 10, which reads as follows:

"The proposed extension to the Belleville warehouse was discussed. The quotations by (a) Finley McLachlan, (b) Wilfred Spencer, were outlined to the meeting by the Building Committee. Moved by N. M. Cowan, seconded by T. H. Dixon, That

the Building Committee continue making arrangements for a quotation on a building to be constructed of pre-cast or slab roof, with cement block walls and a brick facing on the front. Carried."

Under date of November 30, 1961, Wilfred Spencer & Sons of Campbellford wrote to the Board:

"We, the undersigned contractors, having examined your site and the plans of the proposed addition to the warehouse, wish to quote on the erection and completion of the addition as follows:"

They then proceeded to outline an undertaking which was *vitally different* from that described by Finley W. McLachlan Limited, in that, for example, the building was to be of "*Roof Slabs and Blocks, Beams and Columns as engineered and planned by Wilson Concrete Products*". Moreover, it was stated specifically that the "following price does not include for office finish or for temporary septic tank and weeping bed installation" as provided in the McLachlan submission. Most important of all, it did not include refrigeration equipment. The price quoted was \$122,800. A copy of the Spencer quotation is included as part of Part D, Section 6, Exhibit V.

The minutes of the Board, and the Spencer quotation, clearly disclose that (a) these are two completely different proposals associated with the same piece of land; and (b) the formal proposal made by Wilfred Spencer & Sons was received after the Board considered the quotation submitted by Finley W. McLachlan Limited at its meeting on October 6, 1961.

No action was taken to implement either of these proposals in 1961.

Two contracts dated June 3, 1963, were entered into with Wilfred Spencer & Sons, one for \$122,000, and the other for \$4,544, an aggregate of \$126,544. At a regular Board meeting held on June 3, 1963, a motion was carried to "authorize J. A. Johnston to sign the contracts with the general contractor, Wilfred Spencer & Sons . . .". Construction was substantially completed in June 1964.

We have no hesitation in stating that there was, in fact, nothing that could in the most remote way be described as calling for competitive tenders for the addition finally made to the Belleville warehouse.

(ii) Purchase of Oxford Station Properties

The properties at Oxford Station were acquired for \$60,000, and, under express instructions from the Chairman of the Board, no search of title was made.

The purchase in 1963 by The Ontario Cheese Producers' Marketing Board of land, buildings, trucks, fixtures, equipment, and goodwill from Stanley John Sanderson of the Township of Oxford, County of Grenville, has been the subject of considerable debate and speculation.

Under date of May 15, 1963, an Indenture provided for the transfer of five small pieces of land to the Board in and around Oxford Station at a stated consideration of \$33,300. A second Indenture bearing the same date provided for transfer of three trucks, fixtures and equipment, and goodwill at a total consideration of \$26,700. Each of these documents contains the following endorsement:

May 15th, 1963

"To:

Sprague & Cameron,
Barristers, Solicitors,
Belleville, Ontario

"I, the undersigned, being the Chairman of The Ontario Cheese Producers' Marketing Board do hereby specifically instruct Messrs. Sprague & Cameron to make absolutely no searches whatsoever of any kind in connection with this transaction, and I hereby acknowledge that I have been specifically advised by Mr. A. B. Sprague of Sprague & Cameron that searches should be made and I do further acknowledge that Messrs. Sprague & Cameron are not responsible for title or anything arising out of this transaction.

"IN WITNESS WHEREOF the Corporate Seal of Ontario Cheese Producers' Marketing Board has been hereunto affixed and attested by the hands of its duly authorized officials.

ONTARIO CHEESE PRODUCERS' MARKETING BOARD

(sgd.) H. C. Arnold
Chairman

(sgd.) Alan B. Sprague"

The minutes of the Board contain no reference to this endorsement, to search of title, or to survey until a special meeting on August 17, 1964. (See Part D, Section 6, Exhibit I.) Discussion with individual Directors disclosed that most, if not all, of them were unaware of these circumstances until long after May 15, 1963. It is interesting that on August 17, 1964, it was moved by N. M. Cowan and seconded by A. G. Sloan "that the directors of The Ontario Cheese Producers' Marketing Board accept the search of the title at Oxford Station made by H. C. Arnold and A. E. Hicks", and this motion was carried.

It appears to us that this transaction was completed without any significant record of the Board's discussion, agreement, or understanding of many vital circumstances. We have come to this conclusion despite the statement contained in the following excerpt from the minutes of the August 17, 1964, meeting:

"We have also examined all records, the minutes of all meetings, pertaining to the purchasing of Oxford Station and Plantagenet Warehouse in the year 1963.

"After a thorough investigation, we find there has been nothing done without the approval of the Board. There is nothing in the minutes to show but that every motion in this connection was endorsed by the Board of Directors.

"The cost of the two warehouses, some \$93,000, included land, buildings, refrigeration, equipment, trucks, garages, etc. The Board can find absolutely nothing that has been done without their full knowledge and consent and also find everything in connection with these transactions in order, and believe it a safe and sound investment for the cheese farmers of the Province of Ontario."

The foregoing is contradicted in these same minutes, which record that the Chairman said: ". . . some of the property that you men bought at Oxford Station was on Railroad property and you didn't know it and can't get a Deed of the land."

The property at Plantagenet was discussed at a Board meeting held on April 17, 1963, and it was agreed that \$30,000 be offered for the Plantagenet Cold Storage. In fact, \$33,000 was paid, but no reference is made to this in Board minutes except those dated August 17, 1964.

(iii) The Chairman as Manager

The present Chairman is engaged in full-time direction of the Board's affairs, a practice condemned as "undesirable and dangerous" at the Annual Meeting held on January 6, 1956.

At that meeting a Report of a Special Survey Committee was accepted and adopted in full. This Report discussed the administrative arrangements appropriate to the best interests of the Board. It recognized that past performance left much to be desired, and made specific recommendations which are reflected clearly in the following excerpts:

"The representatives elected to the Marketing Board must accept responsibility for forming all policy relative to: the marketing of cheese, the operation of the warehouses, to promotional and

advertising work undertaken, and to public relations within and without the Organization.

"During recent years the policy of our Marketing Board has been that the Chairman of the Board act in the capacity of General Manager. It is our duty to report . . . this procedure as undesirable and dangerous . . . the interests of such an organization are normally better served if the General Manager is a paid employee and not subject to the vagaries of annual election. It has been pointed out to us that the objectives of a business of this class can normally be better served if the policy making personnel and the personnel carrying out the policy are divorced. For instance, when the General Manager of an organization is a member of the Board of Management, he will sooner or later find himself in a position where he must implement policy of which he does not approve, or else he must carry his own policy contrary to the wishes of the Board. It is therefore our duty to recommend that this procedure be discontinued."

In spite of the adoption of this report in 1956, we find that the present Chairman is engaged full time in the Board's activities. This is evident in that he drew his per-diem allowance for 255 days during 1963.

We fully endorse the recommendations made in 1956 by the Special Survey Committee of the Board.

(iv) Conduct of Meetings

The conduct of the Annual Meeting held in Ottawa in January 1964 left much to be desired, and the minutes contain no record of a resolution to limit the Chairman's term of office.

The members of this Committee were privileged to attend the Annual Meeting of The Ontario Cheese Producers' Marketing Board held in Ottawa in January 1964. Under the rotation plan two members of the Board were to be elected at this meeting. We were very interested in the way this was done. There was no secret ballot. The delegates were taken to one side of the room, carefully grouped by counties, and given blank pieces of paper on which they were asked to write the name of the person for whom they wished to vote. These pieces of paper were carefully collected by counties and handed to the Secretary-Manager. After a short interval, the results of the election were announced.

In the election for District No. 6, Mr. A. E. Hicks was defeated. However, it is interesting to note that at a meeting of the six elected Directors later in the day he was elected to the Board as member-at-large.

The Annual Meeting at Ottawa had a number of other interesting characteristics in addition to the conduct of elections. The sessions always started well after the hour for which they were announced. No effort was made to check credentials of the voting delegates from county organizations, and it was widely rumoured at the meeting that a number of those who voted did so quite improperly.

The report of this Annual Meeting contained a record of ten resolutions presented to the meeting, all of which carried. Nine of these were contained in the Resolution paper prepared by the appropriate committee before the meeting, and the tenth was presented at the meeting. None of the ten was of any special importance.

There was, in fact, an eleventh resolution moved by Erwell Huff and seconded by Howard Cleary which proposed that a limitation be placed upon the Chairman's term of office. This resolution had been considered by the Resolutions Committee before the Annual Meeting but was "tabled" by the Committee. There was extended and heated discussion of this resolution. Several of the Directors spoke in favour of the motion but indicated that they would vote against it. Some of the Directors also indicated that they felt unable to assume the chairmanship of the Board. In the end, the resolution was not accepted by the meeting. The official report of this meeting makes no mention of this resolution, which was probably the most important item considered during the two-day meeting, and certainly was the only one that aroused serious debate.

It was evident to the Committee during these two days in Ottawa that there was considerable unrest in many quarters. Several Directors, former Directors of the Board, and others, speaking informally to members of the Committee, denounced in the most forthright terms the way in which many aspects of the Board's affairs were conducted. It was at that time that our attention was drawn forcibly to the need for more extensive study of Board affairs, and as a result, many of those things which we now report came to our knowledge.

Casual scrutiny of the minutes of the special and general meetings of The Ontario Cheese Producers' Marketing Board might lead to a feeling that the meetings are formal, and that a most careful record is maintained. More careful, but not extensive, study will disclose discrepancies. We refer the reader to Part D, Section 6, Exhibits I and II.

(v) The Directors

The Directors lack understanding of many features of the Board's activities on which they should be well informed.

The members of this Committee have spent many hours in careful study of the activities of The Ontario Cheese Producers' Marketing Board. On specific instructions by the Committee, the Chairman and General Secretary interviewed each Director and the Chairman separately.

In general terms, the Directors displayed, and for the most part admitted to, a lack of true understanding of many features of the industry of which they should be well informed as Directors of the Board. It was clear, for example, that they knew little if anything of the market for Ontario cheese in the United Kingdom, or of the factors to be considered when pricing cheese in either the export or the domestic market. They recognized that many actions taken in the name of the Board in recent years have been without the knowledge or understanding of some Directors. One of the Directors in summing up his position stated clearly that he felt "uninformed and ignorant of many things with which I should be familiar as a member of the Board". Some of the Directors repeated those statements made over and over again by the Chairman of the Board. They were generally unable to discuss these statements or to support them with sensible argument. One of them said to us in some desperation, "you will have to talk to Mr. Arnold."

Regulation 423 states that a member of the Board shall be a "producer of cheese", i.e., "the person who owns the cheese at the time the cheese is manufactured". There is no doubt that at least one Director is not a "producer of cheese", and one or two others might have difficulty in demonstrating that they qualify. It is quite clear that this definition has resulted in a great deal of uncertainty, controversy, and dissatisfaction, and we recommend that action be taken to clarify the intent of the Regulation.

(vi) Information to Cheese Producers

Insufficient information concerning the operation of the Board is available to cheese-milk producers; in particular, the financial statements presented at Annual Meetings do not include the activities of the Co-operative, which carries on the most important part of the Board's business.

At public hearings we were frequently told that cheese producers are not well informed concerning the operation and general activities of The Ontario Cheese Producers' Marketing Board.

At a public hearing in Belleville on August 27, 1963, the Secretary-Manager of the Board stated that there were approximately 12,000 cheese producers, and that between 800 and 1,000 copies of the last annual report were printed. This is so despite Section 17 of Regulation 420 under the Milk Industry Act:

"Within six months after the end of each fiscal year of a local board, the secretary of the local board shall forward to the producers or growers entitled to vote under the marketing plan a copy of the annual statement and auditor's report and a general report of the local board's operations for the fiscal year last ended."

It is true that many farmers ship milk to cheese factories infrequently or in small quantities and are not deeply interested in the Board's activities. Nevertheless, we conclude that the Board should assume more energetic responsibility for the dissemination of information to the many thousands of people who have a legitimate interest in its affairs.

One very serious criticism of past arrangements is that cheese producers receive no financial information concerning the Ontario Cheese Producers' Co-operative Limited, in spite of the fact that this is the significant operating segment of the total organization. Financial statements for the Co-operative and consolidated statements for the Board and Co-operative are prepared by the auditors of these organizations and are available to the Board Directors. No significant reference is made to them in the Board's annual report, or in the report of the auditors who append their statutory report to the Chairman and Members of the Board.

Without data concerning the Co-operative, and, indeed, without consolidated financial statements for the Board and the Co-operative, it is impossible to understand the financial affairs of the whole organization. The financial statements that go to members are incomplete and misleading. It is surprising to this Committee that so far as we could learn, no one associated with the cheese industry, has taken action to correct this undesirable state of affairs.

As a specific example of failure to provide desirable information concerning the Board's affairs, we reproduce notes appended to financial statements prepared as of November 30, 1963. The first is part of the audited Consolidated Financial Statements of the Board and Co-operative, which is available only to the Chairman and Directors of the Board:

"Claims totalling approximately \$250,000 have been made against the Board for cheese which was seized by the Food and Drug Directorate. The legal responsibility for this claim has not been resolved as of this date."

The note appended to the audited financial statements of the Board, which is included in the Annual Report made available in limited supply to the cheese producers of Ontario, contains a less informative version of the same circumstances:

"The legal responsibility for claims pending against the Board has not been resolved as of this date. No provision has been made in the accounts for any liability in this connection."

At the Annual Meeting in January 1964, the financial statements covering the Board's activities and its financial position at the end of the previous November became available. There was no previous opportunity to examine them, and as a result there was little or no intelligent discussion of them. Someone wished to know why the Secretary-Manager's salary was \$2,683 as shown in the statement of Income and Expenditures, and suggested that this was less than might be reasonable. No sensible answer was forthcoming. The explanation is, of course, that most of his salary, like the greater part of many other expenses, is included in the statements of the Co-operative, and therefore does not appear in the statements covering the Board's activities.

As at November 30, 1963, the audited Consolidated Balance Sheet of the Board and its wholly-owned subsidiary, The Ontario Cheese Producers' Co-operative Limited, discloses net assets of \$1,447,343. This figure arises from the following sources:

Reserve Fund		\$ 427,096
Grants		
Province of Ontario	\$450,000	
Government of Canada	191,410	\$641,410
Transfer from Reserve Fund in connection with exten- sion to Belleville ware- house	200,000	
Surplus, including invest- ment earnings of \$19,716	178,837	1,020,247
		\$1,447,343

The Reserve Fund represents the unusual balance of amounts collected by the Board to promote the marketing of cheese.

Financial records are maintained by the Board and the Co-operative at the head office in Belleville. The Committee's assistants made a brief review of the records, had discussions with the Board's auditors, and concluded that the accounting records were generally well maintained. However, there were some areas in which improvements could be made. For example, six sets of records are kept—

one for each of the four warehouse operations, one for general activities, and one for the Co-operative—when two sets would be sufficient. Also, there appears to be opportunity for increased mechanization of data processing, and some form of budgetary control might well be introduced.

(f) Recommendations

In this section of our Report we have recorded at some length our appraisal of the cheese industry in Ontario. We have not made an exhaustive investigation of cheese marketing or of The Ontario Cheese Producers' Marketing Board. We have chosen to focus on a limited number of important features which we were readily able to document beyond doubt.

Our principal recommendations follow. They will be more meaningful with careful study of this section and Part D, Section 6, Exhibits I-V, which contain more particulars of some aspects of The Ontario Cheese Producers' Marketing Board, including copies of the minutes of Board meetings held on August 17 and September 14, 1964.

We recommend that:

- (i) the authority and control presently exercised by the Chairman and Directors of The Ontario Cheese Producers' Marketing Board be suspended immediately;
- (ii) an interim Board of Administration of one or more persons be appointed to replace the present Board of Directors of The Ontario Cheese Producers' Marketing Board; this could be done under Section 7 (1) (f) of the Milk Industry Act;
- (iii) The Ontario Cheese Producers' Marketing Board carry on all of its present operations in accordance with sound business practice, under the direction of the Board of Administration; the day-to-day transactions of the Board should be the responsibility of a general manager acting within the policies established by the Board of Administration;
- (iv) the Board of Administration, with the active support of the Ontario government, establish relationships with appropriate officials in the province of Quebec in search of a basis upon which there can be joint action in the export of cheddar cheese; this might lead to one cheese marketing board for the two provinces;
- (v) the Board of Administration, again with appropriate assistance and support from the Ontario government, endeavour to persuade the Government of Canada to establish long-term federal policies affecting cheese, and to provide the earliest possible notice of intention to modify policies;

(vi) the Board of Administration initiate an imaginative and effective programme to promote the sale of cheese in domestic and export markets;

(vii) the Board of Administration, supported by the Ontario government, and in co-operation with the federal government, adopt policies that will promote the production of cheese required to meet demand;

(viii) the Board of Administration engage properly qualified persons to undertake study in depth of the many problems that cannot be solved without extensive research, including:

- the need for cheese exchanges, and, if they are desirable, the manner in which they should be operated;
- the price levels appropriate for domestic and for export markets;
- the way in which these prices should be determined;
- the wisdom of adopting flexible prices for domestic and for export markets;
- the desirability of establishing a single import agency in the United Kingdom, as has been done by New Zealand and Australia;
- the need for technical representation in the United Kingdom to protect Canadian interests;
- the extent to which economies may be possible by the operation of larger-scale productive units;
- the manner in which employment in cheese manufacturing can be made more attractive;

(ix) the proposed Milk Commission and the Board of Administration should, as soon as possible, develop a suitable new basis upon which to operate The Ontario Cheese Producers' Marketing Board or its successor organization; when such basis has been established, the Board of Administration would cease to exist.

Acceptance of these proposals would strengthen the general position of the milk industry in Ontario, and be in the best interests of all who continue to be part of it.

Section 5

FARM-SEPARATED CREAM

- (a) General Outline
- (b) The Ontario Cream Producers' Marketing Board
- (c) Operations of the Board
- (d) The Future for Cream Shippers
- (e) The Ontario Cream Producers' Association
- (f) Recommendations

The first four sections in this part of our Report have been devoted to our recommendations concerning the future of those who ship whole milk. In this section we wish to draw attention to cream shippers.

(a) General Outline

Cream shippers are those members of the dairy industry who separate their milk on the farm and sell the cream for manufacture into butter. The resulting skimmed milk is kept on the farm and generally fed to calves, hogs, and chickens.

There are few accurate figures concerning the number of cream shippers in Ontario. The best estimates suggest that in 1947 there were about 70,000 producers shipping cream, and that this number has decreased to perhaps 27,000 at the present time. Many of these farmers are not regular shippers, nor do they produce a substantial quantity of cream. A great many producers who are included as cream shippers are primarily concerned with the production of milk for cheese or other manufactured products, and ship cream when it is convenient, for example, during the wintertime closing of the cheese factories to which they normally send their milk. We have been led to believe that the average cream shipper is relatively old—over fifty has been mentioned—and that few young men have been attracted to this type of operation in recent years. Also, we have been told that many cream shippers are uninterested in the affairs of The Ontario Cream Producers' Marketing Board because they are “part-time” farmers with very few cows and little interest in operating a commercial venture.

In 1947 there were about 260 licensed creameries; there are about 100 today. In 1947 these creameries, using farm-separated cream, made almost all of the butter produced in Ontario, while we are told that today less than 50 per cent has this origin. Most of the rest of Ontario butter is produced from whole milk received by multi-product plants which engage in the manufacture of butter and skim-milk powder. Some butter results from the extraction of milk-fat necessary to meet the current demand for skimmed or partly-skimmed fluid-milk products. Milk-fat from non-creamery operations will no doubt continue to be made into butter, probably on an increasing scale. The future of farm-separated cream cannot be assessed without recognition of the evident trends.

(b) The Ontario Cream Producers' Marketing Board

The present Board was established under the Milk Industry Act in 1955. Regulation 428 establishes a "Cream-for-Processing" plan for cream produced in Ontario and delivered to a plant for manufacture into creamery butter. Regulation 427 provides for a negotiating committee with power to adopt or settle by agreement minimum prices for cream and the terms and conditions of agreements relating to the marketing of cream.

The Board consists of nine members representing nine districts on a county basis, as defined in the Regulations. In each district there is provision for a "District Cream Producers' Committee" with one representative for each 500 producers or fraction thereof. Everyone who sells cream to a plant for manufacture into butter and pays the 3/10c per pound licence fee set down in the Regulations is deemed to be a producer of cream. Every producer, large and small, has an equal voice under the Marketing Plan.

The Board had current assets in excess of \$120,000 as at September 30, 1963.

(c) Operations of the Board

Through the years the Board appears to have been an informal, loose-knit organization speaking on behalf of cream shippers in a general way. The provisions in the Regulations for price negotiations and formal agreements have never been put into effect. The price for cream has been determined in recent years by direct reference to the subsidies and floor prices established by the federal government. There has been a gentleman's agreement whereby creamery operators pay producers an amount equal to the effective government floor price per pound of butter for each pound of milk fat received.

The Ontario Creamerymen's Association stated in the Brief they presented to this Committee:

"There are very few creameries at any time of the year who pay over the recognized price of cream based on butter value. The larger co-operatives who show profit and at least two privately owned creameries who have more than satisfactory earnings pay a dividend at the end of the year rather than interfere with the traditional price level."

Mr. H. G. Webster, Secretary-Manager of the Ontario Creamery-men's Association, stated at a public hearing in Toronto on August 7, 1963:

"There is only a gentleman's agreement which we try to police ourselves, and about once every three years we find a group who, for one reason or another, feel they must buy cream at a lower price than the agreement, and we meet with the producers and they tell us about it, which we usually already know, and then we go out and try to get them in line. Of course, the feeling is, now if we don't get in line we might get a Milk Board agreement and nobody wants that, so we all get in line."

In general, the creamery operator appears to have been able to cover his expenses by marketing the over-run that results from his ability to make 120 to 125 pounds of butter out of 100 pounds of milk-fat.

The Board, in co-operation with the Dairy Branch of the Ontario Department of Agriculture, has undertaken an extensive quality improvement programme. In 1963 a pilot project, involving two creameries, yielded encouraging results. The Board's share of the cost was \$4,500. In the summer of 1964 a much larger programme was undertaken, this time involving fifty creameries. The Board's contribution is likely to be about \$10,000. The Board should be complimented for this constructive action to which they have made such substantial contribution.

(d) The Future for Cream Shippers

The number of cream shippers in Ontario has decreased greatly during recent years, and the evidence presented to us suggests that we will see a continuing decline. This is the pattern that has developed in those sections of the United States where milk production is important, in some cases to the point where cream shippers are virtually non-existent.

We discussed the future prospects for cream shippers at some length with many people. They are in general agreement with Mr. Glen Cole, President of the Ontario Cream Producers' Marketing Board, who said at a public hearing in Toronto on January 30, 1964:

"Much larger units will become the pattern and quite possibly the farm-separated cream industry will disappear. I have fought this viewpoint in earlier years quite vigorously, but I do not believe that as an economic business enterprise it can continue indefinitely."

(e) The Ontario Cream Producers' Association

An Ontario Cream Producers' Association has been in existence for many years. It has remained virtually inactive since the formation of The Ontario Cream Producers' Marketing Board. The Association's only asset is cash of \$5,000 which was transferred from the Board in 1959. The members of the Board are also directors of the Association.

(f) Recommendations

Based on the foregoing and much other information and opinion that has come to us, we wish to make the following recommendations concerning cream shippers:

- (i) Every farmer who is now engaged in separating cream on the farm should have the same right of access to the fluid-milk market through the Milk Producers' Pool that we have already proposed for other milk producers.
- (ii) Cream separated on the farm should continue to find its way to market in those ways that are already well established in this province.
- (iii) The Ontario Cream Producers' Marketing Board should continue to function without fundamental change in present arrangements.
- (iv) The Regulations under which the Board operates should be reviewed in the light of current circumstances. For example, the electoral system used to establish the Board does not result in proportionate representation because the geographic distribution of cream producers has changed greatly since the present governing Regulations were made. Also, it is not clearly established whether or not a Board member must be a cream producer. This uncertainty should be eliminated because of the ill-will it may generate.
- (v) The quality programme that has been supported so energetically during the last two years should be continued in an effort to ensure that all cream processed into butter should be at least First-grade as presently defined in Regulation 434. Poor-quality cream results in low-grade butter which cannot compete effectively.

- (vi) A more substantial minimum price differential should be established between the various grades of cream in order to encourage and reward Special and First-grade production.
- (vii) The Board should make greater efforts to ensure that the licence fees it receives from creamery operators are of the proper amount. We do not know of errors or discrepancies, but we suggest that independent test-checking of such revenue is a desirable business practice.

Section 6

NORTHERN ONTARIO

- (a) The Area Defined
- (b) Present Arrangements under the Milk Industry Act
- (c) Views Presented to the Committee
- (d) General Proposals
- (e) Distribution Areas
- (f) Collective Bargaining
- (g) Pooling and Bases
- (h) Quality, Sampling, and Testing
- (i) Transportation
- (j) Relationships between Northern and Southern Ontario
- (k) Conclusion

Earlier in this part of our Report we recommended the establishment of the Ontario Milk Commission with general responsibility under a new Act for the milk industry in all parts of the province. Also, we proposed that the Milk Producers' Pool market all fluid milk in southern Ontario.

In this section we describe the arrangements which we believe to be appropriate for that part of the province to which we refer as northern Ontario.

(a) The Area Defined

The phrase "northern Ontario" has a variety of meanings and the interpretation seems to have changed through the years. To some the French or Severn rivers are important as boundaries. To others "northern Ontario" does not include the Lakehead, Kenora, and Rainy River—they are in "northwestern Ontario". There are other interpretations.

We have concluded that for present milk industry purposes "northern Ontario" should include all of the province except the Counties and the provisional County of Haliburton. Study of Part D, Section 6, Exhibits XVII to XXII showing the distribution of cows and milk processing plants in this province will support our decision.

Analysis of the flow of milk reveals that little raw milk crosses this boundary, and that the milk industry activity close to it is a very small part of that in the province as a whole.

Northern Ontario as we define it is a large part of the province. It represents 78 per cent of the total land area, that is, 323,500 square miles. In it live 778,000 people, 12 per cent of the provincial total. It is about 1,050 miles from North Bay to the Manitoba border, 625 miles from Sudbury to the Lakehead, and 280 miles from Haileybury to Hearst, all within "northern Ontario".

(b) Present Arrangements under the Milk Industry Act

In northern Ontario there are now about thirty-five distribution areas and about twenty-five milk producers' Associations. No accurate data are available, but we have made some estimates of the importance of the six major regions: Thunder Bay, Sudbury-Copper Cliff, Temiskaming, Rainy River-Kenora, North Bay and Algoma. About 80 per cent of the population of northern Ontario live in them; they contain about 75 per cent of the cows in northern Ontario.

The present Act is applicable to the province as a whole, and there are no special provisions or exemptions for the northern portion.

(c) Views Presented to the Committee

We held six public hearings in northern Ontario and met with most of the leading figures in the milk industry. There was little disagreement among them.

In general terms they considered the problems of the milk industry in northern Ontario to be quite different from those in the south.

The northern distribution areas were said to be isolated from each other, concerned primarily with fluid-milk sales and geared to meet local fluid demand, subject to peak periods caused by summer visitors in some areas. Production of milk products has been limited, and, generally, less than local demand. Supplies of butter, milk powders, and cheese come from southern Ontario and other parts of Canada.

We heard a great deal about concentrated liquid milk brought in from southern Ontario. There were strong complaints that it was unfair to permit a product made from milk priced under the agreement covering manufacturing milk to be sold in direct competition with fluid milk.

Costs of production were said to be higher in the north than in the south. No documented evidence was produced, but the claim was supported by reference to eight-month stabling, climate, terrain, and

great distances. Higher prices are paid, usually, for almost everything required by dairy farmers—transport, feed, fertilizer, machinery, and gasoline. The general view was that producer costs were markedly higher than in the south, and that it is impossible for northern Ontario producers to compete with those in southern Ontario.

It was suggested that seasonal unemployment was a serious problem in many sections. Many persons working in the bush, mines, or elsewhere were forced to supplement their income with small-scale dairy operations. At the same time it was clear that many farmers were engaged in substantial and successful milk production.

The principal and almost unanimous opinion was that northern Ontario should be left out of any over-all marketing plan or price-blending arrangement which might appear to be suitable in southern Ontario. Essentially, it was claimed that northern Ontario is different; it is a fluid market, primarily; pooling with southern producers would be unfair to the northerners; higher northern costs render competition with the south difficult if not impossible; the difficulties of carrying on agriculture in the north must be recognized.

(d) General Proposals

We recommend that the milk industry in northern Ontario continue to function essentially as at present. It should, of course, be subject to the new Milk Act and operate under the Ontario Milk Commission. It would be necessary to have some special provisions in the Act and Regulations to cover this arrangement, and the Commission's rules and policies would be somewhat complicated as a result. The Dairy Branch of the Department of Agriculture and other segments of government should find their relationships and responsibilities about the same in north and south.

In coming to this conclusion we have studied the general arrangements in other places such as Michigan, British Columbia, and the United Kingdom. In each of them there are circumstances which parallel those in Ontario. We suggest that much can be learned by analysis of the experience of these others.

(e) Distribution Areas

We recommend that there be no immediate change in the present arrangement of distribution areas. As population increases, transportation improves, and technology in the industry develops, we would expect northern Ontario to find that a much smaller number of areas was appropriate to the need. We suggest this as a general policy for the same reasons that we have discussed with reference to southern Ontario.

(f) Collective Bargaining

We recommend that in the immediate future collective bargaining be carried on by local Associations of producers with their distributors, transporters, and others. At the same time, we propose that the Ontario Milk Commission and other authorities study our recommendations in order that the new Milk Act be designed to eliminate present weaknesses and loopholes in collective bargaining arrangements.

The Milk Producers' Pool should provide assistance in collective bargaining to producers in northern Ontario markets. The Pool should have skilled and experienced specialists and these ought to be available, at cost, on request, to bring strength and order to bargaining in the northern regions. Such participation would include advice as to pricing policies and require economic and financial studies. Such participation by the Pool would be in its own best interests and would also result in a stronger milk industry in Ontario and Canada.

It might be desirable to have one informal over-all association of producers to share experiences and to present statements of their common interests to the Milk Commission, government, and other organizations. A similar association might be suitable for distributors.

(g) Pooling and Bases

We suggest that our general recommendations for producer bases and pooling of market receipts be considered for use in the northern regions.

Although conditions in the northern markets differ from those in the major southern market, movement toward uniformity across the province is generally desirable. Also, uniformity would facilitate extension of Milk Producers' Pool operations when new conditions warrant such change.

(h) Quality, Sampling, and Testing

Producers in northern Ontario discussed problems of quality, sampling, and testing at some length. Their difficulties and uncertainties were quite like those that we found in southern Ontario.

We have discussed these matters at length and made extended recommendations in Part C, Section 2 of this Report. We suggest that careful study be directed to this section, and that the recommendations are generally applicable in northern Ontario.

(i) Transportation

Transportation problems in northern Ontario are essentially the same as elsewhere and we direct attention to Part C, Section 3 of this Report. As in the south, important savings would result if all milk were handled in bulk, but this may not be easily arranged. Milk of one quality is essential. These achievements would make possible the elimination of duplication of transport arrangements, and the best possible use of equipment. The experience of the Milk Producers' Pool in southern Ontario would be helpful in the north.

(j) Relationships between Northern and Southern Ontario

We have proposed a clear separation of this province into two parts for milk industry purposes.

We wish to emphasize that this separation is a much less important aspect of our Report than our other proposals.

Specifically, the possibility of extension of the Milk Producers' Pool to northern Ontario should be kept clearly in mind.

The Ontario Milk Commission should assume primary responsibility for development of the maximum possible uniformity in the province. It should knit the two parts together in every possible way while recognizing differing conditions and needs. The Commission should undertake studies which will ensure that expansion of the Pool's operations will take place when this can be shown to be suitable because of changing circumstances. There is no reason to assume that Huntsville, Gravenhurst, Parry Sound, Sudbury, North Bay, Sault Ste. Marie, and other areas should remain outside the Pool indefinitely.

Producers in northern Ontario should have full freedom to sell their milk to southern Ontario markets through the Milk Producers' Pool, subject only to adjustments in price which result from extra transportation and other direct costs.

The Pool should not be free to sell fluid milk in northern Ontario except when necessary to take care of shortages in those markets, as in the summer tourist season, for example. When the Pool sells fluid milk in northern Ontario it should be at no lower price than that currently established by agreement in the local northern Ontario market.

(k) Conclusion

We believe that these recommendations recognize the special problems to be found in northern Ontario at this time. In making them we recognize that circumstances will change. We urge that all concerned be alert to this fact, anticipate new developments, and modify established patterns as appropriate. Only in this way will it be possible to maximize efficiency, minimize costs, and maintain a strong milk industry in the entire province.

Section 7

THE ROLE OF GOVERNMENTS

- (a) The Ontario Government
- (b) Government of Canada
- (c) Municipal Governments
- (d) Inter-governmental Relationships

At the present time, as for many years in the past, all three levels of government have established policies and regulations affecting the milk industry. We believe that there must be a continuing responsibility to establish a general framework and a favourable climate within which the industry can operate efficiently and progressively. There must be a legal framework that will encourage the industry to adapt to changing circumstances and a set of rules that neither stifles initiative nor permits destructive behaviour by a few.

In our opinion, competition is the best regulator and protector of the public interest, but government must act to preserve the essential elements of vigorous competition to best ensure significant progress in the milk industry. The nature of the industry requires that careful attention be directed to the determination of the extent to which competitive forces should be permitted to operate, and to the establishment of the nature of the competition that should be permitted. For example, we believe that free competition between producers in the marketing of raw milk cannot help but lead to destructive competition, and a price level well below that necessary to maintain a suitable level of income. Processing, manufacturing, and distribution seem to represent activities best left with substantial freedom for competitive forces to act. This latter contention can be disputed and no doubt will be challenged, but we consider it to be a valid view.

The federal government has played an important role through the control of imports, subsidies of many kinds, support prices, and the general regulation of interprovincial trade. Most of this activity must be continued in the future if the industry is to operate satis-

factorily. Since 1933 the Ontario government has had a significant part in organizing and controlling the industry and has provided many kinds of assistance. We have come to conclude that the Province can make another vital contribution to the welfare of the industry by establishing a new framework that would eliminate much of its past detailed participation in the conduct of industry affairs.

In the future we anticipate that there will be fewer, larger, and better-managed economic units in all phases of the industry and that these should require less encouragement, protection, and assistance than has been necessary in the past. This development also suggests that there may be greater necessity for prompt recognition of monopolistic activity and for appropriate action to protect the public interest.

The efforts of governments to deal with milk industry problems have been characterized too often by obscure regulations, piecemeal decisions, unpredictable and sometimes illogical decisions, and failure to establish the best possible procedure for declaring long-term policy. If the industry is to adjust effectively to present circumstances, and continue to evolve appropriate patterns of behaviour, it is essential that the role of government be clarified, that regulations be simplified, and that long-term goals and objectives be stated. This is not to suggest that we believe that all these things can be achieved completely at any given time, but we are convinced that such guides should be established and used as a basis of action.

(a) The Ontario Government

In our view the government of this province can make its most important contribution to the welfare of the milk industry by making decisions that will result in the establishment of the Ontario Milk Commission and the Milk Producers' Pool. These two institutions should become focal points for much future change. They should become powerful instruments shaping the welfare of the industry. Wisdom, determination, and early action in the establishment of these key organizations, coupled with willingness to allow them to assume great responsibility, free of all but the most general pressures, would be the most valuable role that the provincial government could play at this time, and in the years that lie ahead. Success in the establishment of these institutions would relieve the provincial Department of Agriculture and other segments of government from most of the present burden of responsibility for control and supervision of the industry.

We have noted that the Ontario government should refrain from direct intervention in those areas of responsibility that we

have recommended should be assigned to the Commission and the Pool. We believe that these organizations are well conceived and, if properly staffed, should be given substantial independence and freedom to act except in the most extreme and unusual circumstances. In our view, the placing of a moratorium on the indicated price of milk under the formula in Ontario in 1962 and the actions by the Quebec government to increase the price of milk in early 1964 represent governmental response to pressures exerted by interested groups. Such pressures should be treated under existing machinery. They should not lead to direct reference to or interference by government. Action by government in such circumstances undermines public respect for regulatory agencies, reduces the authority vested in them, and encourages further use of lobbying tactics.

We believe that the government of this province can establish a framework that will permit private enterprise to function in a way that will best serve the interests of producers, manufacturers, and consumers, and we urge the government to adopt this as its primary objective and responsibility to the industry at this time.

(i) Department of Agriculture

The Milk Industry Act

Milk legislation and related Regulations should continue to be separate from and independent of the Farm Products Marketing Act. We have come to this conclusion because this Act is established with the producer's point of view and interest in mind rather than those of other segments of the industry or consumers. Moreover, we are persuaded that the magnitude, complexity, and characteristics of the milk industry are such that they cannot be satisfactorily dealt with in terms that are appropriate to other agricultural products.

The Agricultural Marketing Enquiry Committee in June 1961 proposed a contrary arrangement. It suggested "that milk marketing legislation in Ontario be consolidated under the New Farm Products Marketing Act". This proposal was predicated on the assumption that there would be an Agricultural Industry Board, also recommended by that Committee, with very general responsibilities for long-term industry-wide planning, for research through the Agricultural Research Institute, for the approval of a marketing plan, and for arbitration of disputes, among other things. This Agricultural Industry Board has not come into being.

The British Columbia Royal Commission on Milk, 1954-55, proposed a similar separation between milk and other agricultural products, and this recommendation was accepted. The Commission's

Report stated that the purpose of the British Columbia Natural Products Marketing Act is "to provide for the control and regulation in any or all respects of the transportation, packing, storage, and marketing of natural products within the Province, including the prohibition of such transportation, packing, storage, and marketing in whole or in part". The Commission noted that "far greater emphasis is placed upon the interest of the producer than the consumer . . . but in so far as milk is concerned, if it is to continue to be marketed locally as a safe, fresh product essential to public health, the interests of the consumer are of vital importance", and concluded, "the law, as has been previously pointed out, should take into consideration the basic economic interests of the producer, but it should be designed to operate for the benefit of the general public, which includes consumers and distributors as well as producers."

There should be new milk legislation to be known as the Milk Act, and completely revised Regulations. These new provisions should be in step with current technological and market conditions, and should facilitate continuing change and innovations. Many examples of past rigidities have come to our attention and we draw specific attention to a few of them at this time: distribution areas; the point at which the sale of raw milk takes place; detailed regulation of transport arrangements; the overlapping of pricing jurisdictions; and an elaborate statement of the days upon which milk may be delivered.

Legislation and regulations cannot be reduced to a form that results in popular reading. However, there have been several examples of legislation of relatively simple, straightforward construction in recent years. We suggest, because milk legislation affects most people in the community, and is of great concern to many thousands, that every effort be made to establish it in simple, straightforward terms in so far as this is compatible with precision. There does not appear to be any reason why there cannot be emphasis on the positive aspects of the Act and Regulations, nor why they cannot contain a clear statement of the intent and objectives that have inspired them, and of the methods by which these objectives are to be achieved.

It is our opinion that in the past the Milk Industry Act and Regulations under it have not always been clear, nor have the provisions been rigidly enforced. As a result some people have failed to understand what was intended, and others have been inclined to ignore the law even when they understood. It is imperative that new legislation be clearly drafted and rigidly enforced if the industry is to progress toward desirable objectives, and if government is to demonstrate resolution to protect the interests of all, with special privileges to none.

The Dairy Branch

Adoption of the major recommendations contained in this Report will greatly reduce the scope of the responsibilities assigned to the Dairy Branch.

We recommend that in future the primary function of the Branch be the inspection and assessment of farm premises, leading to recommendations for licensing of producers, with secondary responsibility to provide advice to producers. The licensing activity would be undertaken in close collaboration with the proposed Ontario Milk Commission.

So-called "extension" activities which are presently undertaken by the Dairy Branch fieldmen have been important in the development of dairy farming in Ontario. However, there is no doubt that there have been significant difficulties as a result of combining in one fieldman the policing functions that farmers associate with the inspection of premises, and the responsibility for advice and counsel that represents extension work. Many Dairy Branch fieldmen are of the opinion that it is impossible to combine these two functions in one person. We can see much logic in this belief. At the same time, we do not support the alternative proposal that two Dairy Branch representatives, one responsible for enforcement and the other concerned with extension, visit the same farms with the duplication of cost involved.

In our discussions with fieldmen, producers, and others familiar with farm conditions and the behaviour of producers, we came to the conclusion that the greatest part of Dairy Branch fieldmen's time has been spent with a relatively small number of producers. These producers, for the most part, are those least able to comply—and least interested in complying—with Regulations. It seems clear that these farmers tend to produce milk of inferior quality. While their performance may improve as a result of specific and repetitive prodding, they are likely to lapse into unsatisfactory practices when left alone. More demanding and forceful regulations would enable Dairy Branch fieldmen to make more effective use of their time. Fieldmen and supervisors in the Dairy Branch must have the full support of government and the Ontario Milk Commission.

The Dairy Branch must co-operate and collaborate with the Ontario Milk Commission in many ways. We have already mentioned the licensing of producers and the advice and assistance to them which we believe can be a combined responsibility. The Dairy Branch fieldmen should also assist the Commission by inspecting manufacturing establishments prior to licensing, by providing technical assistance to creameries and to cheese factories, by ensuring that all manufacturing plants comply with Regulations, and in other ways.

The Dairy Branch and the Commission should be able to mutually provide important strength in fulfilment of what must be a joint responsibility. At the same time there must be no confusion concerning the role of each of these two bodies, nor of the authority and accountability of the persons working for them. In the past one of the important sources of difficulty in the Dairy Branch has been the ill-defined relationship between the Milk Industry Board and the Dairy Branch, and the role of the individuals who appear to have had primary responsibility to both.

Dairy Branch fieldmen will no doubt be expected to take an increasingly important part in the presently evolving co-ordinated approach toward provision of counsel of considerable variety to farm families. As farms decrease in number and increase in size there will no doubt be ever-increasing recognition of the importance of farm budgeting, record-keeping, and analysis of these data. Without assistance many farmers are unlikely to be able to provide for their own needs in these areas. Dairy Branch fieldmen should be competent to provide such guidance, and have the time to assist farmers in their search for better understanding of their problems and in analysis of their operations.

During recent years the Dairy Branch has experienced considerable difficulty in finding and retaining able professional people. In large measure this has been because very few graduates of the Ontario Agricultural College have come through the Dairy option, and because the starting salaries authorized to the Department are not truly competitive with those available in alternative employment. Our observations have led us to believe that the Dairy Branch in attempting to secure staff to cope with increasing responsibilities has been unable to find enough people with the desirable qualifications, and has had to employ many inexperienced, inadequately qualified people. This double lack, compounded by high staff turnover, places a heavy burden on those at supervisory levels. We have come to conclude that the Dairy Branch would be better advised to hire fewer people, selecting them with the greatest possible care, and paying them somewhat better. Such a policy should reduce the burden of supervision, attract more able and interested people, and extend the period of their employment.

The Engineering Branch

Adoption of the proposals contained in this Report would require additional investment by many farmers and involve construction and modification of many farm buildings. Increased size of herds and more efficient management of them necessitates increased attention to farm layout, provision for better drainage, farm ponds, improved ventilation, changed material handling arrangements, and

other important physical changes. In all this, the Engineering Branch, through the Agricultural Engineering Extension Service, should be able to provide important assistance. In our view this could best be done in co-operation with Dairy Branch fieldmen.

The Livestock Branch

Like those of the Engineering Branch, the services of the Livestock Branch can be extended over a wide range of activities in closer association with Dairy Branch fieldmen.

Of particular importance to the welfare of dairy farmers is the extension and strengthening of Dairy Herd Improvement work which has been carried on for many years. The systems of milk recording presently available under Dairy Herd Improvement Association (D.H.I.A.) and the federal Record of Performance (R.O.P.) arrangements are discussed later in Part C. We refer to them here in order to emphasize our concern with the inadequacy of past arrangements, and our conviction that progress in the milk industry will depend heavily upon early and important extension of studies of this kind.

The Livestock Branch has been extensively concerned with control and eradication of brucellosis, and with the successful operation of artificial insemination units. Each of these undertakings has long since demonstrated its importance to milk producers in this province. Neither activity has achieved greatest possible results, and we believe that government should continue to support these undertakings.

The Economics and Statistics Branch

This Committee was surprised and disappointed to find so few data of significance to the milk industry available through this branch of the Department of Agriculture. For example, we were astonished to find that the Agricultural Statistics for Ontario for 1963 published a table showing monthly stocks of creamery butter in Canada from 1947 to 1963, but nowhere made reference to the very substantial stocks of butter oil which must be taken into account in any meaningful consideration of butter inventories in recent years.

We have already recommended that the Ontario Milk Commission develop data specifically related to the milk industry, and have stressed that such information and analysis of it is vital to sensible decision-making. We suggest that these efforts be correlated with those of the Economics and Statistics Branch.

Marketing Development Branch

This branch of the Department of Agriculture has had very

little to do with the milk industry. Marketing of fluid milk is restricted to Ontario with the exception of that which finds its way into areas of Quebec immediately adjacent to the provincial boundary. The marketing of milk products within Canada falls naturally to those engaged in private enterprise, and the export market receives important attention and support from the federal government. The nature of Canadian export opportunities and the present role of the federal government leave the Marketing Development Branch of the Ontario government with limited opportunity for significant participation.

Raw-milk cheddar cheese represents an important exception to the foregoing general statement. We have come to conclude that there are important opportunities for increased sales of this product in Canada, and some prospect of additional sales in the United Kingdom. We have devoted somewhat extensive comment to these opportunities elsewhere in this Report. We recommend that the Marketing Development Branch, in close co-operation with The Ontario Cheese Producers' Marketing Board, make extensive studies of these potential markets in order to provide a general background against which the industry might be encouraged to recognize the opportunities more clearly, and to make more significant efforts to develop them.

(ii) Department of Health

The Department of Health and the Department of Agriculture have long had a joint interest in and responsibility for the milk industry, and this should continue.

In Part C, Section 2, we discuss quality and composition of milk at some length, and recommend that there be continued and extended use of the laboratory facilities operated by the Department of Health in the control of milk, and in the conduct of such testing as may be desirable in the future.

For many years this Province has required that nearly all milk for human consumption be pasteurized. Improved transport and almost universal refrigeration now appear to make it practicable to extend these requirements to all areas, and we so recommend.

The Environmental Sanitation Branch of the Department of Health has for many years assumed important responsibility in the inspection of milk plants and the equipment used in them, and these services should be continued.

(iii) Department of Transport

This department has had no more than a general and superficial concern for the milk industry, participation having been largely

limited to the details related to the licensing of milk truckers. The Department should continue to be concerned with such licensing in that the transport of milk is an integral part of the commercial haulage of merchandise in this province. We draw attention, however, to our recommendations for simplification of licensing arrangements, which are discussed at some length in Part C, Section 3. In brief, we are persuaded that the present arrangements are unduly restrictive, that the milk industry would be more efficient if greater freedom were accorded those who wish to enter into transport contracts, and that a detailed description of routes is an unnecessary part of the licensing arrangement.

(b) Government of Canada

Under the British North America Act the federal government has important jurisdiction over dairy products moving into inter-provincial and foreign trade. This has led to establishment of appropriate standards and grading procedures, and representation in significant foreign markets.

The Government of Canada exercises a most important influence over the milk industry through price supports, subsidies, and a substantial variety of other assistance programmes. The most vital arrangements are those that establish floor prices and subsidies. These, in effect, set the minimum price to producers of milk used for manufacturing purposes, and have an important influence on the price received for fluid milk. These same federal policies and payments make possible the export of dairy products. Without such support and participation in export problems, it is unlikely that butter and skim- and whole-milk powder would have been marketable. The position of raw-milk cheddar cheese is less clear, and we have discussed this elsewhere. In brief, federal assistance and, specifically, floor prices, are essential to fundamental stability in the milk industry.

Department of Agriculture

Our study of the milk industry in Ontario has impressed us with the very great importance of the long-range policies of the federal government. There is ample evidence to support our inclination to suggest most forcibly that without knowledge of such policies effective planning, continuity of production, and sensible allocation of resources are impossible. We urge the Department of Agriculture of the Government of Canada to make every effort to establish long-range policies, and to make clear declaration of them at the earliest possible time. We recognize that this may be unattractive to the party in power and that there may be important difficulties when changes in policy become necessary. We also recognize that

there are inherent dangers in establishing long-term policies, but the benefits warrant the risks.

We recommend that serious consideration be given to the establishment of a multi-party Agricultural Policy Committee and that this Committee recognize the importance of the establishment of long-term policies for the effective guidance of agriculture generally, and the dairy aspects of it in particular. This Committee's activities should be facilitated as a result of the establishment of the new Economic Council whose primary responsibility appears to be associated with long-term planning and the establishment of forward-looking policies.

We suggest also that announcement of detailed changes in floor prices, subsidies, and other supports be made at a time that will permit farmers and others to allocate their resources and make operating decisions in a sensible manner. For example, in recent years the Minister of Agriculture has announced changes in the export subsidy on cheese in late April, to become effective in early May. This does not permit producers and others to decide on their best course of action for the ensuing production period. If the Minister's statements were made, say, in January, much more intelligent decisions would be possible.

We realize, of course, that many changes must become effective immediately, but we are inclined to believe that many others would be more effective if there were a period of time during which discussion, reflection, and modification were permitted to those most directly affected. This same interval would permit desirable modification of the proposed changes. For example, in 1957 there was a sudden, unpredictable, and substantial increase in the floor price of spray-process skim-milk powder to 17c per pound. The result of this was somewhat precipitous action by producers and manufacturers. New and unnecessary production facilities were installed, and milk was diverted into the production of skim-milk powder and butter. There is little doubt that the ensuing increase in skim-milk powder and butter stocks which the government was forced to acquire under this policy and later sell at a substantial loss can be attributed in a significant way to this unrealistic 17c floor price.

We suggest that if this change had been put forward as a proposal some months before the new support was to become effective there would have been more mature consideration of the reasonableness of transfer of resources from one segment of the industry to another.

In somewhat similar fashion the elimination in 1963 of the butterfat subsidy payment to those in any way engaged in the production of milk for fluid purposes led to unfortunate uncertainty

combined with bitter and destructive dispute. We suggest that time for consideration, discussion, and clarification of intent would have done much to smooth the processes of change. It is true, of course, that during this period there would have been representations to government, and no doubt somewhat vigorous protest. Government should be able and willing to withstand the pressures that such proposals generate.

The members of this Committee do not pretend to be competent to judge the technical features of the milk industry. We have, however, made some serious effort to gain understanding of the quality of product presently available. As a result of our observations and statements made by those fully competent to judge we conclude that there is a very great variety in the quality of milk products. It is quite easy to find examples of low-grade, unattractive merchandise. The grade of butter recorded on the package is not a sure guide to quality. We have tasted some cheddar cheese that was most unattractive.

We recognize that complete control of the quality of products offered to the consumer is impossible. We suggest, however, that more can be done than is presently undertaken. For example, more extensive testing and grading of products offered for sale in retail outlets would be beneficial. If this were done, retailers would do more to preserve the quality of the merchandise that comes to them. This same increase in pressure would do much to curb the inclination of some manufacturers to up-grade marginal products. It would also curb the assignment of grades that pass inspection at the time of manufacture but prove invalid by the time the product reaches the consumer because there are inherent characteristics that cause deterioration.

Department of Health and Welfare

This Department has an important influence on the conduct and welfare of the milk industry because of its responsibility for establishment and enforcement of the Food and Drug Regulations.

During the last year our investigations took us into a large number of plants in this province. We cannot believe that the sanitary conditions observed in several plants are satisfactory for the production of food of the quality which the people of this country can reasonably expect. Our conversations with the operators of these plants and other interested parties have led us to conclude that there is need for more stringent enforcement of regulations concerning plant operating conditions.

We have been unable to come to positive conclusions concerning skim-milk powder. However, our limited observations, the opinions

expressed to us by those well qualified to speak, and the general tenor of the conduct of affairs within the industry suggest to us that higher standards and stricter enforcement of regulations would do a good deal to improve the quality of skim-milk powders sometimes offered for human consumption. It is true, of course, that the adoption of our general recommendations would result in rapid elimination of low-quality milk and that the inferior products to which we have just made reference are less likely to be significant. At the same time our recommendations do not cover all milk immediately, and responsibility for inspection of plant conditions, enforcement of regulations, and testing of final products must remain an important responsibility of the Department of Health and Welfare.

Department of Trade and Commerce

The Dominion Bureau of Statistics falls within the authority of the Minister of Trade and Commerce. This Committee had great difficulty in securing statistical data of many kinds. One of the important examples is that there is little or nothing known of the interprovincial flow of milk and milk products. Because of this, we have been unable, for example, to come to a convincing conclusion concerning the extent to which the producers of milk manufactured into cheese in this province are subsidizing the export of that product, only to permit cheese manufacturers in the province of Quebec to replace it for consumption in Ontario. We recognize that there are many demands made upon the Dominion Bureau of Statistics, and that information of this kind may not be as vital to the welfare of the nation as other data. However, we must record our concern, in the belief that appropriate action will be taken at the earliest possible time.

The supervision of weights and measures is also a responsibility of the Department of Trade and Commerce. With the paper container there is a new source of uncertainty for the consumer. Such packages are not intended to be full, and they frequently leak. The result is considerable scepticism among consumers, and on more than one occasion we have been informed that quart-size paper containers simply do not contain a quart of milk.

We understand that those responsible for weights and measures have been unable to assume responsibility for the accuracy of the contents of paper cartons. In the past, Food and Drug authorities have acted upon complaint, but we understand that assessment of the accuracy of contents is now being made as a routine procedure. No doubt the public will come to a healthier attitude toward the milk industry, and a happier respect for government as a result of this new arrangement.

(c) Municipal Governments

The Milk Industry Act in Part II provides that any municipality may pass by-laws to license, regulate, and govern the behaviour of vendors of milk—that is, persons who sell milk, cream, or fluid-milk products to consumers, or persons, other than producers, who sell fluid milk or fluid-milk products to any person for resale. This provision includes the right to prescribe hours during which milk products may be delivered, and the appointment of inspectors. An inspector may prohibit the sale of milk that is produced or handled in a way contrary to the general regulations made by the Milk Board. He may inspect the premises of vendors of milk, take samples of products offered for sale, and test them, and the tests may be published by the Medical Officer of Health for the municipality. Further, an inspector may enter premises, wherever located, of any person producing fluid milk for sale within the municipality, again to take samples and tests for publication by the Medical Officer of Health if this is desirable.

These provisions have not resulted in uniform action across the province. In some municipalities no action at all has been taken. Developments in recent years such as the extended operation of the Department of Health, the agreed sharing of responsibility by the Departments of Health and Agriculture, the trend toward fewer days of delivery of milk, extension of store hours, building of shopping areas outside, but adjacent to, urban municipalities, the use of vending machines, the rapid growth of convenience shopping in Jug Stores, and the new and revolutionary ability to transport milk long distances at low cost have done much to invalidate present arrangements under the Act. These developments do much to destroy the ability of most municipalities to control the milk industry. Moreover, there is much to be said for broader controls on a provincial basis in that beneficial uniformity can be achieved, probably at lower costs.

We suggest that the need for municipal participation in the milk business has largely disappeared, and that most municipalities recognize this fact. We recommend that present local authority over quality, health standards, and the conditions under which milk is produced on the farm be removed. We recommend further that the provisions contained in Regulation 432, under the Milk Industry Act, Sections 88-95 and the related schedules, be completely reviewed and a substantial degree of uniformity achieved for the entire province. The present complexity of arrangements appears to be unnecessary and prevents the ready development of effective delivery arrangements across the province. In general terms, we suggest there be no continuing restrictions of this nature, in the belief that this would permit maximum use of available resources, reduction

of costs, and consolidation of distribution arrangements. We are persuaded that restrictive municipal by-laws designed to protect local dairies will be costly to the community in the short run, and unlikely to produce lasting benefits either for distributors or consumers.

(d) Inter-governmental Relationships

Many milk industry problems evolve out of the fact that there are in Canada ten provincial governments and a central government, each with powers established under the British North America Act. These problems are of two kinds: interprovincial, and federal-provincial.

Inter-governmental considerations are recognized more clearly now than ever before, and are the subject of very great concern and extensive debate. They generally relate to the extent to which governmental responsibility shall be centred in the federal authority, and are greatly complicated by the present tendency toward provincial economic regionalism.

The milk industry in Canada is one of many illustrations of the need for new attention to interprovincial and federal-provincial relationships. The present determination of many provinces to achieve greater decentralization of responsibility increases the difficulty of achieving co-ordinated policies at a time when conditions within the milk industry make them more than ever necessary.

Throughout this Report we have noted many of the factors that create a growing necessity for inter-governmental co-operation and understanding. These developments include the latent capacity to increase milk production in Canada and in other nations, the resulting difficulties for a "high-cost" nation competing in world markets, rapid development of low-cost transportation, the great variety of new and pending product and package innovations, and the tendency toward fewer and larger operating units at every level in the industry. A most important aspect of this last phenomenon is the continuing growth of national and international corporations engaged in the milk business. Their operations transcend provincial and national boundaries, and will become increasingly difficult to reconcile with our past experience which is based on a substantial number of relatively smaller organizations operating for the most part on a local basis.

These and other considerations make clear that in the milk industry it is necessary, through conscious action, to develop and maintain close and harmonious relations between provinces, particularly between Ontario and Quebec, and between the federal government and the provinces—again with some emphasis on Ontario and Quebec.

(i) Interprovincial trade and co-operation

Interprovincial problems are likely to increase in complexity unless able and determined attention is directed to them immediately. These problems are varied in their nature and origin.

Butter produced in Western Canada is sold in substantial quantities in Ontario, and is held by many to be superior in quality to that produced here; this contention is well supported by the grading reports prepared by federal authorities. The provinces of Ontario and Quebec each produce about one-third of total Canadian milk. There is good evidence to suggest that forthright efforts are being made to increase efficiency and quality in Quebec, and that growing emphasis on dairying will, in all likelihood, result in stiffer competition between the milk industry in Quebec and in Ontario.

There are many factors which suggest that there should be continuing examination of the need for the establishment of one fluid-milk marketing area embracing all of southern Ontario and southern Quebec. For somewhat different reasons, it is important to recognize the desirability of serious exploration of joint efforts by Ontario and Quebec in the marketing of raw-milk cheddar cheese. It is to these and other very important considerations that we direct attention in the following pages.

Ontario has progressively lost her dominant position in the milk industry, while Quebec has steadily increased in importance as a dairy province. In 1921 Ontario produced almost 40 per cent of the total milk production in Canada, while Quebec's production accounted for about one-quarter of the total. By 1962, Ontario produced less than 35 per cent of all milk produced in this country, while Quebec's proportion had increased to 34 per cent.

Another and somewhat different impression is created by noting the relative importance of dairying in the agricultural economy of the two provinces. In Quebec, in 1962, milk production generated about 37 per cent of the total farm cash income, whereas in Ontario it provided only about 20 per cent.

We have already noted the strong competition between Ontario and other provinces in manufactured milk products. Competition in the fluid-milk trade is limited largely to Ontario and Quebec. Fluid milk flows in considerable quantity into the Montreal market, while milk flows both ways at the Ottawa River border. Another inter-provincial flow of fluid milk is that from a limited number of farms in Manitoba to the Kenora market during the summer season.

We recommend that there be no artificial barriers or interference to the free movement of and trade in milk and milk products

between provinces. We cannot support the present tendency in many quarters to establish small local markets protected by artificial arrangements of one kind or another. We must reject such inclinations whether they relate to small municipal markets in Ontario or those of provincial magnitude. We believe that the economic welfare of this country is dependent upon internal free trade, and that only in this way will we achieve the greatest advantage for the whole country.

We recognize the dangers and difficulties of wide divergence in provincial policies affecting the industry, and recommend that efforts be made to establish similar policies from province to province, particularly in Ontario and Quebec. For example, there has been important confusion and uncertainty in the Ottawa market in recent months because of differing policies and bases of pricing raw milk in the two provinces.

We urge continued interprovincial discussion at the administrative and highest levels in order to achieve agreement and action on milk industry matters. Based on our association with senior administrative officers of Quebec and Ontario and statements by responsible people we believe that there is a favourable climate for extension of understanding in the milk industry of the two provinces. We recommend that there be continued consultation between the appropriate officials in both provinces before major policy decisions are made in either, in the hope and belief that this will encourage reciprocal action.

One final but important comment: mass meetings are unlikely to produce worthwhile results. The problems call for clearly defined plans, carefully considered by the few who can make significant decisions.

(ii) Federal-provincial relationships

Progress in the dairy industry must depend to an important degree on federal leadership. This statement brings to mind familiar jurisdictional barriers which, for the most part, are not significant in the milk industry. In so far as they are pertinent, there is no evident reason for concern if governments at both levels are willing to seek solutions.

To the degree that Canadian milk and milk products enter into international trade, the central government becomes involved. During recent years, and in the foreseeable future, it seems that opportunity for export is limited without substantial subsidies or other supports. This was well summed up by Dr. S. C. Barry, Deputy Minister, Canadian Department of Agriculture, when he said: "We have

priced ourselves out of many export markets since our prices are, in Canada, with few exceptions, the highest in the world." Despite this situation, we have continued to export, although in relatively small volume, and export markets will continue to be an important outlet for a portion of our products. As a nation, we can afford to accept the sale of some products with subsidy and of some others at less than cost as a reasonable price to pay for essential stability in the industry.

A few of those concerned with the long-term future of the industry spoke in support of a national plan for milk. Mr. John K. Dickson, Past President of the Dairy Farmers of Canada, stated in January 1964: "there is no Ontario problem any more than there is a Quebec problem—there are only dairy problems", and added, "I believe that any lasting solution to our problems must be . . . can only be . . . made on a national basis." We have already indicated our acceptance of some of the implications contained in these statements. We have been unable to agree with those who have suggested a national plan for the marketing of fluid milk as a reasonable objective at this time. Present difficulties associated with fluid-milk production and distribution are primarily within provinces, with the important exception of the areas adjacent to the Ontario-Quebec border.

At the present time there is little co-ordination of the limited milk research activity undertaken in this country. We strongly recommend that the Departments of Agriculture of the federal and the provincial governments join in a co-ordinated research programme. There must not be duplication of effort if we are to achieve maximum benefit from the resources available. The Canadian Dairy Advisory Committee, established in 1963, might well serve as a useful agency for this co-ordination.

We have already noted the importance of formulating long-term federal policies after joint discussion with the provinces. We emphasize that this should result in clear statements of the goals and priorities which the federal government proposes for the dairy industry from time to time. These, of course, can be no more than statements of intent, but they would do much to produce stability, and establish confidence within the milk industry.

We can best conclude this section by quoting extracts from an address given by Mr. S. B. Williams, Chairman of the Agricultural Stabilization Board, to the National Dairy Council in September 1964:

"Since 1958, in order to provide assistance to this segmented industry, policy under the Agricultural Stabilization Act has been directed to what is essentially the "shoring up" of the

weaker segments, with the program being changed periodically to meet situations—perhaps unfortunately all too often after they had become well developed rather than to anticipate them before the situation became serious.

“In the first year the Board was in operation a total of slightly over \$8 million was directed toward dairy support. Of this, just under 90 per cent went to the powder industry. In the following year the amount was almost double, with the emphasis being shifted to milk for manufacturing, although powder still continued to receive about 40 per cent of the total funds. The following year milk for manufacturing received the preponderance of the payments (80 per cent) with powder becoming of lesser importance but with expenditures on butter assuming major significance.

“The next shift in emphasis was towards increased assistance to the cheddar cheese industry and a further downward shift in payments on powder. In the last full fiscal year, namely 1963-64, butter and cream assumed major significance, but casein entered the field as a contender for the subsidy dollar.

“It does seem to me that the lesson to be learned from this is that, when prices are dictated largely by relatively rigid support programs, imbalance in the production of the commodities under support is almost certain to occur. As is usual with things of this nature, it is simply a case of the pendulum swinging too far and recovery being relatively slow and impeded.

“The challenge—I am sure you can all see it—is to provide a climate and to provide an industry so constituted as to permit of economic freedom that will allow milk to flow where needed and where best marketed, a climate in which price in the market place regains its rightful position in dictating production.”

Co-operative efforts between federal and provincial authorities can provide the base upon which the milk industry in Canada can grow to greater strength.

PART C

OTHER RECOMMENDATIONS AND OBSERVATIONS

Section 1

PRODUCTION COSTS AND FARM MANAGEMENT

- (a) The Cost of Milk Production
- (b) The Purpose of Cost Studies
- (c) Present Farm Recording Programmes
- (d) Farm Management

In the course of the Committee's inquiries it became apparent that there is a serious lack of knowledge concerning the cost of milk production. This same deficiency extends to the more general information vital to sound farm management. Moreover, there is widespread misconception concerning the validity and usefulness of the data that are available.

There is no doubt that many producers are unable to solve their problems because they do not have information upon which to make intelligent decisions. Also, many farmers do not realize that they need such information.

The Ontario Royal Commission on Milk, 1947, emphasized the need for an expanded programme of data collection and analysis, particularly in relation to producer costs. While some worth-while steps have been taken in this direction by the provincial government, it appears that the industry in general and producer groups in particular have failed to assume the necessary measure of responsibility.

It seems clear that producers collectively have relied upon limited government studies to provide information relative to production costs. This is confirmed by the following extract from a brief submitted by the Ontario Whole Milk Producers' League:

"Some years ago the League did have established figures on the cost of production of fluid milk. It was found that when used in negotiations they were constantly challenged, and seldom served the purpose for which they were intended. Being controversial, they always kept the League on the defensive, and being costly to maintain, they were discontinued. We are sure you will find our methods of production as efficient and up-to-date as any."

This attitude is paralleled in a brief presented by the Ontario Concentrated Milk Producers' Marketing Board, which recommends that "the cost of producing manufacturing milk be given its proper weight in any formula or other method of pricing". In exploring this recommendation, the Committee was informed that the Board had no definite cost of production, "but we have the Improvement [D.H.I.A.] figures, and they vary to a substantial amount". It was admitted that these figures could not be used on an individual basis in establishing a price, "but you could perhaps come to some figure on the whole".

During the Committee's public hearings discussion of production costs ranged in the extreme from highly technical analyses to the tart remark of a producer that costing is "good exercise for boys and girls but serves no useful purpose for adults".

Inferences drawn by individual producers from published results of existing cost studies showed remarkable variations, from near-scepticism to positive belief. There can be no doubt that there is a wide range in producer interest, knowledge, and attitude toward production costs and cost studies.

(a) The Cost of Milk Production

It should be emphasized that, contrary to popular belief, there is no such thing as "*the cost of milk production*". There are innumerable combinations of variables entering into milk production costs. The variables include management practices, weather, farm location, land fertility, size of operation, financing, and the ability of one cow to produce more milk than another under similar conditions. These combinations, as they apply to the individual producer, are of vital concern to him, but taken as a whole result in the impossibility of establishing a meaningful figure that can be called, in the general sense, "*the cost of production*".

From the limited cost studies available, and from our observations, it seems clear that there are a number of important factors of general application that affect milk production costs. Geographical location is one of these; for example, in northern Ontario costs

generally appear to be higher than in southern Ontario, owing to shorter pasture periods, inability to produce sufficient feed, and additional costs of basic farm supplies. Another dominant factor is the nature of the individual dairy enterprise: fluid-milk producers, to comply with regulations, may incur considerably greater expenditure for facilities, equipment, and related maintenance than other classes of producers. This may result in a relatively lower net return than might be expected from the premium selling price obtained. Notwithstanding such general influences, however, it would appear that the principal characteristic of costs in the Ontario dairy industry is their wide variation.

(b) The Purpose of Cost Studies

In view of the foregoing, the purpose of production cost studies should not be to develop cost-of-production figures which could be used directly in determining milk prices. Rather, there are three principal areas in which continuing uniform studies over as broad a base as possible would be of considerable value.

The first of these is the delineation, in relative as opposed to absolute terms, of the general trend of the commoner costs associated with dairy production, and the relationship of this trend with returns from milk sales. This would provide an indication of industry well-being.

The second area concerns research. Data accumulated would be available to researchers for studies of such matters as economies of scale and the best use of resources. In the past such studies have been limited because of the difficulties and expense involved in obtaining sufficient data. The principal beneficiaries of such research would be the producers.

The third and most important area concerns the producers themselves. Participation in cost determination studies would increase the producer's awareness of good accounting practices, and the means by which historical and budget information derived therefrom can be utilized in his decision-making. If we assume the availability of general statistics and forecasts and appropriate organizations such as provincial extension groups to provide technical assistance, the participating producer would have improved means of measuring his performance and formulating plans consistent with his objectives and resources.

Unquestionably, continuing or special farm cost studies are complex and expensive. They are subject to many limitations in means of measurement, allocation, and applicability. This is evidenced by the cost and limitations of existing continuing studies.

Moreover, in the course of its public hearings and other inquiries, the Committee obtained a very unfavourable impression of the quality and extent of producer record-keeping. This leads to the obvious conclusion that refinement and expansion of producer cost studies will be a long and expensive process that will require extensive educational measures to overcome producer apathy and lack of skill. Nevertheless, this Committee considers that the proposed Ontario Milk Commission, to effectively fulfil its responsibilities for the well-being of the industry, must conduct, promote, co-ordinate, and correlate programmes for continuing study of production costs.

(c) Present Farm Recording Programmes

(i) Ontario Dairy Herd Improvement Association

The only significant continuing study of milk production costs in Ontario is the Dairy Herd Improvement Association (D.H.I.A.) programme conducted by the Livestock Branch of the Ontario Department of Agriculture. This programme was designed as an aid to good management, and not as a basis for obtaining precise costs. It was formulated along the lines of the federal government Record of Performance (R.O.P.) programme for measuring the volume and quality of production of individual cows. Despite its limitations and shortcomings, D.H.I.A. has made a positive contribution to the industry, and warrants considerably stronger governmental and producer support.

The D.H.I.A. programme, begun in 1949, has the following stated purposes:

- (a) to provide a recognized system of recording milk production,
- (b) to provide members with information on their costs of production, and possible ways of improving their financial results, and
- (c) to accumulate information on sires useful to artificial insemination units.

For a producer to be eligible for participation in the programme, no more than 80 per cent of his herd may be pure-bred and all animals in a herd must be included. Participants are divided into Associations usually having from twenty-two to twenty-five members. For each Association the Livestock Branch provides a supervisor who visits each member one day a month to measure and test production, and to enter, among other things, revenue and expense information from the farmer's records in a book provided for D.H.I.A. purposes. At the end of each year these books are forwarded to the Farm Economics and Statistics Branch of the Ontario Department of Agriculture for summarization.

Cost summaries, both over-all and for their own Association, are made available to members for comparison with their individual figures so that they may be encouraged to adopt better management practices where these are indicated to be desirable. Specifically, information is given showing the effect on production per cow and on cost per 100 pounds of milk, of improved breeding programmes, feeding practices, use of labour, use of capital, and size of herd.

Unquestionably there is a lack of precision in D.H.I.A. cost-of-production figures. In general, the figures are compiled from farmers' records, which may vary considerably in their reliability. Moreover, some facets of dairy farm costs must be based on arbitrary allocations and estimates which may vary considerably between farms, or even, where estimated by supervisors, between Associations. Nevertheless, the figures, as evidenced by published results, serve a useful purpose in improving farm and herd management.

Participation in D.H.I.A. over the past several years has remained fairly constant at about 1,300 herds, representing about 3.5 per cent of the dairy cows in Ontario. Members pay an annual fee averaging about \$35, as against the estimated annual cost per member of about \$275. The provincial government assumes the balance of the costs of the programme, about \$300,000 annually.

It is noteworthy that in 1960 a policy was adopted whereby any member whose herd production average is less than 80 per cent of the Association average in three consecutive years is asked to withdraw from the programme. This appears to imply that such producers are either incapable of making good use of D.H.I.A. services or are uninterested in self-improvement, and that they are denying the benefits of the programme to other producers who are interested. This is unfortunate because some Associations have been wound up because of lack of members. It appears that in most areas the demand for membership is not greater than can be accommodated.

There is little doubt that the D.H.I.A. programme has been helpful to participants, and annual reports indicate great improvement in over-all production results. Moreover, the information obtained relative to sires is said to have been of inestimable value in bull selection for artificial insemination. However, because membership is limited to owners of herds with at least 20 per cent grade animals, the considerable and growing number of owners of pure-bred herds are denied these benefits.

This Committee considers that every effort should be made to continuously refine and expand the D.H.I.A. programme so that its benefits can be made available to a greater number of producers. Among other things these efforts might include increased promo-

tional activity, development of alternative plans involving greater producer participation, monthly reporting, inclusion of pure-bred herd owners, and removal of the need to meet present competitive production levels. At the same time, however, the Committee believes that the share of programme costs borne by the producer should be increased. Not only would this ease the burden of the public, but also it would tend to discourage the apathetic producer. By paying more for the service, producers should be inclined to make better use of it. Moreover, producer pressure would be created to ensure that the service does, in fact, continue to be of value.

In this connection, similar programmes in other countries such as Holland and the United Kingdom, and in the principal dairying states of the United States have not only a much higher percentage of producer participation but also a greater variety of alternative plans available to producers. Generally, producers in these countries pay considerably more of the cost of the service, while the governments concerned divert more funds into research and the development of programmes to promote production improvements.

(ii) Federal Record of Performance

Presumably the justification for the limitation on D.H.I.A. membership is that owners of pure-bred herds can avail themselves of the federally-sponsored Record of Performance (R.O.P.) programme. However, this programme, which may be useful for testing volume and quality of milk production, does not relate to operational costs. In fact, it has been suggested by some that the R.O.P. programme has been better suited to those selling livestock than to those producing milk for a livelihood. This is one reason why only a very small percentage of Ontario dairy farmers are R.O.P. participants.

(iii) Ontario Farm Management and Accounting Project

There is another Ontario farm recording programme conducted to identify ways in which participating producers can improve the profitability of their farm business operations. This is the Ontario Farm Management and Accounting Project, sponsored jointly by the Department of Agricultural Economics of the Ontario Agricultural College, and the Farm Economics and Statistics Branch of the Ontario Department of Agriculture. More than 1,300 farmers, not necessarily engaged in dairying, maintained and submitted detailed account books for summarization in 1963. There were 115 in 1950 and 548 in 1960. The programme is entirely voluntary and no checks are made of the farm record books except for mathematical accuracy.

Generally over 50 per cent of participants in the project are classified as either "dairy specialty" or "dairy general" farmers,

and separate summary statistics are produced for each of these groups in the annual project report. These summarized results, because of a very pronounced geographic bias in the sample of co-operating farms, deficiencies in data recording, the small number of participants, and other weaknesses, can in no way be considered representative of the progress and present state of agriculture in the province, and tend to be misleading.

We have concluded that the Ontario Farm Management and Accounting Report should not be published in its present form and probably should not be published at all. The bar chart displayed on the cover purports to show "Average Net Farm Income per Farm, 1951-63". The report cannot possibly provide this information because of the limited number of farms included in the study and the great variety in size of farms included, and because computation of labour income during the first years of the study is based on the unweighted averages for individual types of farms. In view of the other factors, even weighted averages would provide a most dubious measure of "Average Net Farm Income per Farm". We did not attempt to analyse this study in greater depth.

However, from the standpoint of the co-operating producers and the agricultural specialists conducting the project, considerable advantages can be gained from undertakings of this kind. Every encouragement should be offered for the improvement and expansion of this and similar projects. Such projects, coupled with related extension services, are vital if the over-all level of Ontario dairy farm management is to be improved.

(d) Farm Management

Dairy farming is in a state of continuous adjustment because of changes in technology, demand patterns, and basic economic conditions. The degree to which the individual producer can cope with these changes rests primarily upon his managerial skill, namely his ability to determine what innovations are necessary, and to carry them out quickly. Successful farm operation is becoming increasingly dependent upon good management, which is as much a matter of business skill as of technical proficiency.

In the conduct of its inquiry the Committee observed among producers a wide range of attitude, efficiency, and capacity relative to farm management. While farmers increasingly are regarding their occupation as a business rather than a way of life, there still appears to be a considerable lack of understanding of basic economic principles and continuing failure to adopt a business-like approach to the farm operation. For example, many producers fail to understand the need for maintaining accurate production and financial

records and have no appreciation of the differences between current and capital expenditure. They have no real understanding of depreciation, total costs, or returns to land, capital, labour, and management. They are reluctant to use credit despite its availability and attempts to educate them to its use.

(i) Gross Income versus Net Profit

In the face of rising costs many producers endeavour to increase gross income whereas they should try to maximize net profit. They fail to realize that an increase in the volume of milk produced, and in the number of dollars handled, will not necessarily result in greater net profit. The increase in the volume of business will result in *lower* net profit if the additional costs exceed the additional receipts, and this often happens. All of this is obvious to many producers, but others need to be reminded.

The installation of bulk tanks seems to have led some producers into a profitless pursuit of larger gross income. The tank may be only partly full at any time; efforts to use it more nearly to capacity may result in lower net profit.

This is confirmed in the following extract from a brief presented by the Toronto Milk Producers' Association:

"Part of the dairy farmer's dilemma traces from the high degree to which his costs are fixed costs. . . . In the face of rising costs and relatively stable prices for milk, the dairyman's first alternative for achieving his income goals is to increase production. . . . This usually means producing more milk to be sold at a secondary price, thereby yielding a lower unit return."

(ii) Seasonal Costs

In this connection, much has been said to the Committee about seasonal variations in cost and specifically the high costs of winter production. It may well be that to some producers the comforts of a warm house as opposed to the discomfort of a cold milking parlour render useless any attempt to analyse their situation. However, the trend toward larger, more specialized farms, coupled with technological change, is resulting in higher fixed costs and loss of flexibility in the use of facilities. The fixed cost element of a dairy enterprise continues regardless of the level of production. Accordingly, from the standpoint of producing the highest annual *net* profit, the additional costs incurred for winter production over comparable summer production are worth while as long as the revenue from winter production exceeds the direct costs.

Seasonal costs are a matter of considerable practical importance. Part D, Section 5, Table VI shows the variation in total milk pro-

duction in Ontario by months. There is a great, although diminishing, gap between the periods of high and low production. There is no conclusive evidence, but it seems reasonable to believe that the significance of fixed costs, and their tendency to increase during recent years, have been underrated. As a result, many producers may be failing to produce milk at low additional cost during winter. The even production achieved in many parts of the United States apparently reflects acceptance of this contention.

(iii) Reluctance to Adopt New Methods

There is a multiplicity of farm management information and assistance available to the milk producer in Ontario. Nevertheless many producers have been slow to adopt new methods and to change traditional patterns of activity. Conservatism seems to be characteristic of many producers, resulting in reluctance to adopt even proven innovations. Some instances noted were continuing doubts about artificial insemination, ignorance of the value or proper use of fans, lighting, and ventilation in barns, and resistance to scientific approaches to feeding, culling, and animal husbandry. It would appear that many farmers still need to be directed to available sources of information. There is also a need for extended research in dairy farm management. Such research must lead, not follow, the industry, and above all must be translated into terms understandable to the producer.

(iv) Economies of Size

Earlier mention has been made of the trend toward larger, more specialized farm units, and there is every indication that this trend will continue. In part this has been made possible by technological innovation—the advent and acceptance of mechanical aids such as tractors, milking machines, gutter cleaners, mechanical feeders, pipelines, and bulk tanks. With the use of such equipment one man can now attend to the production of more milk than ever before, enabling him to increase the size of his enterprise and to improve his net return.

Labour-saving devices cost money and generally require a certain production volume. Volume, in turn, leads to further specialization. However, while size and volume may offer an opportunity for reduction of unit costs and therefore greater profit, increase in size without sound management may mean only a compounding of difficulties.

Research studies relating size of enterprise with costs and returns have been conducted in various areas of Canada and the United States. These indicate that economies of scale appear to be

realizable up to 300,000 pounds production annually (thirty to forty cows), and that beyond this level, size appears to be of minor importance in cost reduction. However, because of the state of technology and market conditions in the more important areas covered by the studies, the results are not necessarily applicable to Ontario. Further studies of economies of scale could be of great potential benefit in providing managerial guide lines to Ontario milk producers.

(v) Bovine Mastitis

Bovine mastitis is very prevalent among dairy herds in Ontario. It may arise from mishandling during milking, infection, or other causes, and takes various forms. Basically it is an inflammation of one or more quarters of the udder.

Sometimes mastitis is treated by antibiotics, either under the direction of a veterinary or by a producer. Milk produced during the course of the disease is not desirable for human consumption, and the residue of antibiotics which may remain in the milk is potentially dangerous.

At a public hearing in Toronto the Ontario Veterinary Association presented a brief voicing concern for the economic loss to farmers due to bovine mastitis, and the lack of steps to provide organized control and adequate research facilities.

In 1962 the Ontario Department of Agriculture sponsored a pilot research study of mastitis for 150 herds in five counties near Ridgetown. The results of this study indicate that control programmes reduce the incidence of mastitis.

Effective December 1, 1964 a voluntary mastitis control programme was made available to Ontario farmers having a herd of at least ten cows producing milk for human consumption. This programme is administered by the Veterinary Services Branch of the Ontario Department of Agriculture, and for this purpose the province is divided into areas serviced by veterinary laboratories located in Ridgetown, Guelph, Brighton, Kemptville and New Liskeard.

(vi) Basic Principles and Conclusions

Farm management is the utilization of sound principles in the selection, organization, and conduct of an individual farm enterprise for the purpose of obtaining the greatest possible profit. Farm management and accounting projects, intensive educational programmes, and continuous research with publication and circulation of findings, would appear to be the principal means of improving

the management of Ontario dairy farms. This Committee believes, therefore, that the proposed Ontario Milk Commission should take the lead in fostering or furthering such activities by whatever measures its members consider appropriate.

The principal concern of farm management improvement programmes should be economic and relate to the development of farms that are strong economic units or can become so. However, the problems of many Ontario milk producers are as much sociological as economic. Many farmers do not know they are uneconomic since they keep no records. Some have paid for their farms and do not take into account depreciation or interest on capital employed. Still others know they are waging a losing battle but cannot get their money out of their equipment and premises. And then there are many who know they are uneconomic, who are dissatisfied with their situation, but who do not know where else to go. For many reasons there are farmers who are unable, despite assistance, to make an adequate living for their families.

Empty, tumbledown farm houses and barns, and neglected fields stretching for miles along concession roads in various parts of the province bear mute testimony of the evolution taking place in Ontario agriculture, and are portents of changes still to come. Improvements in farm management levels can only accelerate these changes and increase the magnitude of the social problems and the urgency of the need for measures to cope with them. Programmes such as those of the Agricultural Rehabilitation and Development Agency (A.R.D.A.) must be intensified so that better use will be made of human as well as natural resources. These must, however, be identified as social measures in order not to reduce the public support required for economic measures such as farm management improvement programmes.

(vii) Summary

Intensified farm management research, farm accounting projects, and educational programmes will serve to improve the management and operation of Ontario milk producing farms, but cannot correct all of their deficiencies or their proprietors' prevalent attitudes. Farm management and the use of farm management aids are highly personal matters. These aids can help to make the farmer better informed, more alert to detect error and identify areas for improvement, more aware of alternatives, and better able to judge the costs and consequences of different decisions. Decisions and their execution, however, will always remain the responsibility of the farmer himself. In the long run, the producer who most effectively observes, analyses, decides, and acts is the one who will survive and prosper.

Section 2

COMPOSITION, QUALITY, SAMPLING, GRADING, AND TESTING OF MILK

- (a) Composition
- (b) Quality
- (c) Nutrition
- (d) Quality Standards
- (e) Importance of Quality
- (f) Quality Improvement
- (g) Sampling
- (h) Grading and Testing
- (i) The Basis of Payment for Milk
- (j) General Conclusions and Recommendations

We are concerned here with milk in its natural state.

The related topics of composition, quality, sampling, grading, and testing of milk were of great concern to almost everyone who appeared before the Committee. Many different opinions were expressed, and it is clear that there has been much discussion of these subjects.

Standards for the composition, quality, and grading of milk are primarily the responsibility of the provincial Department of Agriculture, but the federal Department is also interested and influences the provincial attitude in many respects. The Food and Drugs Act enforced by the Department of Health and National Welfare governs the safety, purity, quality, labelling, and advertising of all milk and milk products, but milk products entering inter-provincial and international trade attract most attention.

Our general observations and conclusions can be stated quite simply. In recent years there has been important improvement in standards of quality, and in sampling, grading, and testing; there remains, however, considerable opportunity for further progress,

and we urge that present serious efforts be continued, and accelerated where possible. Recent changes in public taste, medical research, and a variety of technological developments suggest a new basis of payment for milk. The Ontario dairy industry should adopt as a primary objective the achievement, at a very early date, of a single high quality for all milk for human consumption.

(a) Composition

Milk contains the following principal ingredients: fat, protein, carbohydrate (lactose or milk sugar), calcium, Vitamin A, thiamine, riboflavin, and water. The proportions of these ingredients vary from animal to animal, from season to season, with the stage of lactation, with age, and between breeds. There has been much dispute concerning the importance of these variations, especially between breeds. There is no precise way in which to express the range of these variations, but the following table, based on a test conducted during recent years by members of the staff of Ontario Agricultural College and Ontario Veterinary College will give some idea of it.

Percentage Composition of Milk by Breeds

Breed	No. of Lactations	Protein	Lactose	Other non-fat Solids	Solids-not-Fat	Fat	Total Solids
Jersey	329	4.02	4.80	.49	9.31	5.23	14.54
Guernsey	326	3.65	4.84	.50	8.99	4.78	13.77
Ayrshire	296	3.37	4.77	.50	8.64	3.86	12.50
Holstein	331	3.23	4.74	.51	8.48	3.76	12.24

(i) Breed Milk

The relative merits of milk produced by the four principal breeds have been argued vigorously before this Committee and elsewhere. There can be no conclusive statement on this troublesome subject, but in summary, we believe that the differences between milk produced by the Channel Islands breeds—i.e., Jersey and Guernsey—and that produced by Ayrshire and Holstein cows are not sufficient to merit the separation of milk into two separate and distinctive classes. We have come to believe, as was stated to us, "that there are greater differences among cows within a breed than there are between breeds".

The variations in milk composition by breeds, by herds, and by cows within herds seems best treated by pricing milk with reference to those ingredients which appear to represent a proper basis for settlement.

We recognize that the energetic and imaginative efforts of those who produce Channel Islands milk have resulted in some special recognition of the Jersey and Guernsey designations. We are inclined to support their determination to continue to market milk under these names so long as the milk so marketed does, in fact, have the origin indicated by its name. There should be no great difficulty in arranging for these branded lines within the general framework of the Milk Producers' Pool recommended in Part B, Section 2 of our Report. Useful precedents will be found in the Minneapolis and Milwaukee markets and in the United Kingdom.

(ii) Minimum Standard Composition

Under Ontario Regulation 431 standard milk means fluid milk that contains not less than 3.25 per cent and not more than 3.9 per cent milk-fat, and not less than 8 per cent milk solids other than milk-fat. Most distributors attempt to achieve a 3.4 per cent milk-fat standard. This appears to be their estimate of the margin necessary in order to avoid criticism for failing to meet the standards stipulated in the regulations.

In Ontario, payment for milk is based on milk-fat content. Fluid milk is purchased on a 3.4 per cent basis, and milk for manufacturing purposes on a 3.5 per cent basis. In other provinces basic milk-fat tests ranging from 3.4 per cent to 4.0 per cent are used for fluid-milk settlement. Manitoba, Saskatchewan, and Alberta use 3.5 per cent as standard and so do Federal Milk Marketing Orders established in the United States. These variations have been confusing and have made comparative studies difficult. So long as milk-fat continues to be used as a basis of payment for milk we recommend that a uniform standard of 3.5 per cent fat content be used in Ontario.

(b) Quality

The quality or degree of excellence of milk has long been discussed. Everyone is in favour of high quality, but there is too little agreement as to bases for assessment.

Part of the difficulty appears to stem from the fact that producers, processors, and consumers alike are uncertain whether they are talking about milk as a beverage or as a food. The qualities that make it attractive as a beverage are somewhat different from those that make it desirable as a food.

In assessing the quality of milk as a beverage, the significant tests are subjective in nature and include general appearance, colour, smell, consistency, and absence of foreign matter. These easy, almost automatic, tests of quality are used by the drivers of bulk trucks at the farm, the receiver when milk is brought to a plant in cans, and by the ultimate consumer, whether at home or in a restaurant.

When milk is appraised as a food, much more complex and controversial standards are necessary. The assessment of milk as a food may depend upon the needs of those who consume it, and these vary significantly from one person to another, with age, health, other food consumption, nature of physical activity, and more subtle considerations of which there is limited knowledge. Considerable research has been undertaken in an effort to achieve meaningful but simple means of appraisal. Studies have been made of human needs, and much progress has been made in recognizing how milk fills them. However, a great deal of research remains to be done, as those best qualified are the first to admit. Moreover, it is evident that present assumptions and conclusions must be modified as new knowledge becomes available.

(c) Nutrition

The value of milk as a food has been the subject of much discussion. Most people are not as well informed as they should be because milk is a somewhat complex liquid and those who are most interested in its production and marketing have sometimes made extravagant and inaccurate claims for it. A surprising range of views was presented to this Committee. Some people stated that consumption of milk in substantial quantities is vital to health for all persons of all ages; others expressed the belief that the essential components could be replaced without undue difficulty, sometimes from less costly sources.

A great deal of research in nutrition has been completed since the Ontario Royal Commission on Milk presented its Report in 1947. Moreover, in recent years there has been a great deal of public concern about cholesterol. The Committee sought an impartial, authoritative summation of present knowledge on these and important related subjects. Dr. George H. Beaton, Professor of Nutrition, School of Hygiene, University of Toronto, prepared an extensive statement in order that the people of this province might be able to resolve some of their present doubts and uncertainties. This will be found as Part D, Section 6, Exhibit X.

(d) Quality Standards

The principal standards used in determining whether or not milk is fit for human consumption are specified in the Milk Industry Act. The provisions concerning fluid milk are somewhat more demanding than those concerning the milk that goes into manufactured products.

We are of the opinion that a single high quality standard for raw milk should be achieved in Ontario as soon as possible. To this end we recommend that:

- (i) no animals other than cattle be housed in quarters in which cows are stabled and milked;
- (ii) milk houses be required on all farms where milk is produced for human consumption, whether in fluid form or in the form of milk products;
- (iii) there be uniform enforcement of quality regulations across the province;
- (iv) producers who habitually fail to achieve the standards established be required to withdraw from the dairy industry.

These recommendations are based on standards that have already been accepted in Ontario as desirable in the production of milk for human consumption in fluid form, and on the results of our inquiries and observations.

(e) Importance of Quality

Everyone in every phase of the dairy industry seems to agree that the highest-quality raw milk is necessary in order to produce top-quality milk products. This has been stated over and over again by many people for a very long time, and we do not propose to dwell on this subject at length, but it may be that there is need for new emphasis on this old theme.

Milk in its various forms competes directly with an ever-lengthening list of non-milk products. Many of these are the result of extensive and costly research. Uniform non-milk products of high quality are presented for consumer acceptance. The development and the marketing of non-milk products in substantial quantities can be successful only through a high degree of productive efficiency and intensive marketing efforts. The businessmen who are engaged in these undertakings bring energy, imagination, resources, and determination that appear to us to be lacking at many points in the milk industry.

The best possible quality in raw milk and milk products must become a matter of new and urgent concern for all who have a part in the milk industry. Here is a statement made by one of Ontario's foremost milk producers, Mr. G. R. McLaughlin of Beaverton:

“As dairymen, we have a very real stake in quality, for it has a tremendous influence on the market for our products. . . . We are putting money into advertising milk and milk products to improve the climate for their sale to the consumer. How foolish and expensive it is to put money into selling a product . . . and then doing less than our best to assure the acceptability of that product. Our markets for dairy products depend upon

many factors, but none of them is more important than quality. The efforts of the many dairymen who are doing their best to provide high quality can be undermined by a few careless and inconsiderate 'cow-handlers'."

Mr. J. M. Hartwick, president, The National Dairy Council of Canada, 1963, holds a similar view:

"There is no room, ultimately, for a double or triple quality standard of milk intended for human food in any form. The old comfortable assumption that milk going into certain uses will be subjected to treatment that will overcome initially poor quality never had any validity; such milks have been accepted because no better was available and because resultant defects in the finished products have not been immediately noticeable. In today's competitive markets the quality scale will become of paramount importance both in domestic and export trade.

"In moving towards the ideal of 'one quality only-the-best'—admittedly a difficult objective—every effort of education, close grading and price incentive should be used. In addition, regulations should be strictly enforced to ensure that milk rejected by one factory does not slip into the market through subterfuge."

(f) **Quality Improvement**

There is no doubt that the quality of raw milk and milk products produced in Ontario has improved quite dramatically in recent years, although not uniformly in all sections of the province nor in all products. Analyses of milk quality, and the grades accorded milk products provide evidence in support of this statement. However, changing standards, new methods, and the subjective nature of much of the assessment render impossible precise measurement of the magnitude of the improvement.

Improved quality is essentially a matter of better management, care, and cleanliness. There is abundant evidence to support this contention on individual farms, in individual plants in Ontario, in other parts of Canada, and in other countries. Furthermore, improved quality should result in increased net returns.

The quality improvement achieved to date reflects the efforts of the Dairy Branch of the Department of Agriculture; the concern and financial contribution of the Cream Producers' Marketing Board; research by universities, government, and business; the incentive of a slightly higher price for top-quality milk; and the premiums paid for top-quality cheese and butter by the federal government.

Technological changes have also had an important influence on quality. Producers have adopted stainless steel equipment, mechanical milking, artificial cooling, and bulk handling. Transporters use

high-speed bulk tank trucks. Plants have better storage and handling. Retailers use refrigerated counter space, and take better care of dairy products.

Further improvement in quality will come with wider adoption of modern techniques and equipment throughout the industry and as a result of:

(i) Adoption, as a goal, of a single high standard for milk quality. Milk grading No. 1 and No. 2 using present tests is now available to supply all fluid-milk needs. There is not far to go to eliminate milk of lower grades, and in a relatively short period of time—perhaps three years—all milk for human consumption might well be of one high quality.

(ii) Acceptance by all persons concerned with the milk industry of responsibility for quality improvement. All conscientious people will play their part, and those farms and plants that survive must assume their full share of responsibility. In general, the industry wants higher standards, and is prepared to make the efforts necessary to achieve them.

(iii) Increased incentives and pressures to encourage producers toward higher quality milk. Under the negotiated agreement, manufacturing milk grading No. 1 and No. 2 now receives a premium of 10c per 100 pounds over that of lower grade. (See Part D, Section 6, Exhibit VIII.) Many plants pay the much higher premium—say 25c—that we feel to be appropriate.

(iv) Uniform enforcement of carefully prepared regulations under the proposed Milk Act. Many difficulties now confronting the industry result from regulations that have been unworkable. Dairy Branch fieldmen have spent too much time attempting to enforce these regulations with a small proportion of producers. Part of the difficulty is that failure to conform brings little or no penalty. We have been led to believe that the great majority of problem farms, producing most of the low-quality milk, are the smallest units, operated very often on a part-time basis, or by older people who seem to be either unwilling or unable to change their methods in order to achieve a product which conforms with present-day standards of quality.

(v) Regular review of quality regulations to ensure that they keep pace with changing production techniques and research findings. Present quality tests were developed for milk having temperatures ranging from 50 to 65 degrees Fahrenheit. There is doubt as to their validity when applied to milk that has been cooled to, say, 33 degrees when handled by bulk methods. Tests for quality must also recognize the use of antibiotics and the application of chemical sanitizers.

(vi) Changing standards to exert pressure toward higher quality. In British Columbia the plate count for bacterial content has recently been established at 75,000 per millilitre with this objective in mind. (The present standard in Ontario is 100,000 bacteria per millilitre.)

(vii) Assumption of quality improvement as an important responsibility by retailers and consumers. Only by acquiring milk in suitable quantities, providing refrigeration, and disposing of it in the order in which it was acquired can the best characteristics of milk and milk products be safeguarded.

(g) Sampling

Samples of milk are taken in order to test for milk-fat and other characteristics. Sampling is the responsibility, primarily, of the driver who collects bulk milk, and the person who examines cans of milk at the receiving point. Careful sampling is essential to accurate testing.

The driver of a tank truck must have a milk grader's licence, and assumes a measure of risk and responsibility for the quality of the milk he accepts at each farm. The low temperature at which milk is kept in bulk tanks eliminates most opportunity to assess by smell; the milk that is pumped into the bulk truck loses its identity and can never be recovered by the producer; one tank of milk of very low quality or dangerous characteristics will contaminate the whole truckful. The grader's procedure and responsibilities at each farm are to measure the milk, using a dip-stick, to start the agitator, and when the milk is thoroughly mixed, to take a representative sample for milk-fat analysis and grade the milk by tasting. This is supposed to be done before any milk is transferred from the farm bulk tank to the tank truck. He is expected to leave a written record of weight and temperature of each tankful of milk he accepts. He may refuse to accept milk because of flavour or other faults, but must take immediate action to see that appropriate re-appraisal is made by those responsible for final decision in order that the producer be protected from loss.

Milk that comes to a plant in cans is assessed superficially as to smell and appearance by the receiver immediately after the lid is loosened from the can. The milk is then dumped into the weigh can and the weight of the shipment established. When the whole shipment is in the weigh can, a sample is taken and added to those samples of milk supplied by the same shipper on previous occasions in order to create a composite sample. This is analysed twice each month for milk-fat, and settlement is made on this basis.

This Committee heard innumerable complaints from producers concerning the skill with which samples were taken, and the

accuracy with which tests were made. The vital difficulty is that sampling and testing are conducted for the most part by those who buy milk or by their employees. The farmer has relatively little ability to check the skill with which the samples are taken, the care with which they are preserved, or the accuracy of the tests based upon them. This has led to considerable suspicion among producers, forthright denial of negligence or bias by purchasers of milk, and a considerable uneasiness within the industry.

We listened to charges, counter-charges, suspicions, and doubts for many, many hours. We have come to the following conclusions and recommendations:

- (i) Many Ontario producers are convinced that the payments they receive for their milk are based on lower than actual tests, and are dissatisfied with present sampling and testing procedures;
- (ii) There is nothing that resembles a deep-seated, widespread scheme to defraud producers;
- (iii) Errors due to negligence of varying degrees are inevitable;
- (iv) Smell, taste, and visual examination will not serve to detect all undesirable milk, but they will continue to be useful preliminary tests;
- (v) Farmers with bulk equipment are not making all possible effort to check the validity of the weights and tests assigned to them by those who buy their product. Every farmer can—and many do—record the weight of the milk in his tank prior to each pick-up; every farmer can—and few do—take his own sample and arrange for independent analysis of it. Those who are in doubt have opportunity to establish the truth at little cost and effort.
- (vi) At the present time composite samples are prepared from each shipment of milk. This is a time-consuming undertaking, occasionally resulting in difficulty and error. We suggest that a serious effort be made to devise a sampling procedure that will eliminate the need for attention to each shipment. It seems reasonable that fewer samples, taken with care and without the date of sampling being known to the producer, would produce results that were at least as accurate as those now achieved. The composition of milk during a short period of time, say a month, changes little. Test sampling on a random basis, coupled with severe penalties for dishonest action such as watering of milk, should produce better results with less effort than is presently expended.
- (vii) Many producers complained that the truck driver failed to agitate the tank for the prescribed five minutes. In other jurisdictions (Great Britain and Minnesota) two or three minutes of

agitation is considered to be sufficient. We recommend that careful study be made of the agitation required, and that producers, and representatives of the Department of Agriculture and the Ontario Milk Commission, take appropriate steps to ensure that the necessary interval is strictly observed.

(viii) We heard many strange and wonderful stories concerning the accuracy of the measurement of bulk tank milk. Error stems from failure to install and maintain the tank on a horizontal plane, inaccuracy in the dip-stick calibration, and such oddities as substantial dents in the bottom of the tank. Precise measurement of the weight of the milk in a bulk tank is difficult, but due care will eliminate most uncertainty. We recommend that the onus for precise calibration rest with the producer, and that there be severe penalties for using apparatus that is lacking in precision.

(ix) In future the Ontario Milk Commission should assume responsibility for the general supervision of the sampling of milk in Ontario.

(h) Grading and Testing

Under Ontario regulations there is no precise difference between grading and testing raw milk for quality. In simple terms, however, grading is a superficial and subjective examination by taste, smell, and general appearance. Testing suggests a wide variety of more exacting activities, with varying degrees of complexity and usefulness: the Babcock test for milk-fat content, sediment tests, the plate count for numbers of bacteria, Resazurin reduction tests for bacterial activity, and tests for acid in cream. Other tests used in Ontario include the gelatin test for mastitis and direct microscopic test for types and numbers of bacteria. In research work there are quantitative chemical tests for protein, carbohydrates, calcium, and other constituents of milk.

In Ontario the onus for all testing prescribed under the regulations is placed upon plants buying milk for processing. In practice, most plants are equipped to make only milk-fat tests, but some of the larger organizations are able to make other tests. Some tests are made by private organizations under contract, but a great many more are carried out by the Department of Agriculture, usually with the assistance of the laboratory facilities maintained by the Department of Health.

As we have already noted, tests for milk-fat content are a matter of suspicion, dispute, and unhappiness between producers and those who buy milk. One producer claimed to have shipped precisely the same milk to two different plants and received very different test results. We have been told many times that tests under D.H.I.A.

and R.O.P. assessments are higher than those received from milk processors. Dr. A. N. Myhr was asked to comment on this contention. His reasons for the discrepancies and the illogical nature of such comparison are to be found in Part D, Section 6, Exhibit XIV.

There is another side to the story. Milk is typically 86-88 per cent water. Some farmers have learned that water can be sold at a substantial profit under certain circumstances and so long as the action is not detected. When milk contains 10 per cent added water, the cost of this water to the purchaser is 33c per cwt. if the price of milk (3.4 per cent milk-fat, with a price differential of 5c) is \$5 per cwt.

A pilot study was made in 1961-62 to determine the amount of water added to milk. In summary the conclusions reached were:

- (i) Of 530 samples of milk, 8.3 per cent contained more than 3 per cent added water, and three samples contained more than 20 per cent added water.
- (ii) The largest number of adulterated samples occurred in the range of 3-10 per cent of added water.
- (iii) It seems that frequently water has been added because of determination to preserve or establish quotas.

The testing of milk offers important opportunities for research. Some of the uncertainties that exist are:

- (i) The importance of bacterial activity as a measure of the quality of milk or of the sanitary conditions under which milk was produced;
- (ii) The influence on bacterial growth of cooling to near freezing-point temperatures;
- (iii) The need for extensive bacterial development in milk used in the manufacture of cheddar cheese;
- (iv) The effect of chemical sterilizers on tests presently in use.

(i) The Basis of Payment for Milk

Milk-fat as a basis of payment for milk in Ontario and many other jurisdictions seems to have its origin in the easy identification of milk-fat as an important component, the development of a simple method of testing for it, and the long-standing importance of milk-fat when used in the manufacture of butter, coupled with the relative unimportance of the remaining skim-milk fed to livestock.

In recent years there has been strong interest in the adoption of a method of pricing that would recognize the value of the other

important components—protein, carbohydrates (lactose or milk sugar), and calcium, for example—and in line with present-day preferences reduce the emphasis placed on milk-fat. This inclination reflects the growing understanding of and emphasis on the nutritional values of milk and acceptance of it as an economical and convenient source of essential nourishment. There are many bases which could be used, including fat plus protein, fat, protein and lactose, fat plus solids-not-fat, and total solids.

Such methods of payment have been adopted in the Netherlands (1959), in California and by a Milwaukee co-operative (1962), and elsewhere. See references in Part D, Section 6, Exhibit XIII. This subject received extensive attention in a Report on Milk Composition in the United Kingdom (1960), which recommended that “differential payment schemes for solids-not-fat should be introduced as soon as possible . . .”.

This is a complex subject with many ramifications, including the following:

- (i) There is no general agreement as to the desirability and relative values of the principal components of milk. Some authorities suggest that many Canadians would be well advised to reduce their intake of milk-fat. Others place emphasis on total solids in the belief that “these are present in milk in well-balanced proportions and they are in a form ready for immediate use by the body—there is no waste”.
- (ii) In theory, at least, *all* of the components should be included in the settlement. As practical matters, the measurement of the total nutritional value of milk and precise conversion of this to monetary values is impossible.
- (iii) Any significant progress toward multiple-component pricing must be based on the three major constituents—fat, protein, and lactose—and probably include all solids-not-fat. Accurate measurement of these components at a reasonable cost has been a major obstacle. A new procedure described as “infra-red milk analysis” (IRMA) is now under test in Ontario. Preliminary reports suggest that it will solve this problem of measurement of essential components. A statement by Professor D. A. Biggs, University of Guelph, who is in charge of this study, is presented in Part D, Section 6, Exhibit XII.
- (iv) The inclusion of price differentials for, say, fat plus solids-not-fat content above or below established levels results in important complexities, but differentials are inevitable if equity and control are to be achieved. Also, the proportions between fat and solids-not-fat differ between breeds and between sections of the country. A variety of proposals have been made to deal with these problems.

(v) Studies of the composition of milk in Ontario and elsewhere lead to the conclusion that the correlation between fat and solids-not-fat in milk from different cows is not strong enough to judge solids-not-fat content by fat analysis alone.

(vi) In the same way there is little understanding of how and to what extent the solids-not-fat content of milk could be changed by appropriate breeding. Many years of experimentation would be required to secure the desired knowledge.

(vii) The attitude and action in other countries is important. Emphasis on milk-fat content has been an important guide in the breeding of Canadian cattle. Any change in objective might have important implications. For example, if those countries to which Canadians sell cattle were to adopt total solids as an important or primary measure of the value of milk, and Canada or Ontario failed to go in the same direction, there would be danger of losing much of the present and potential markets for cattle.

In view of the foregoing and other considerations, including those reflected in Part D, Section 6, Exhibits XII and XIII, we recommend that:

(i) the Province of Ontario move toward adoption of a basis of payment for milk which includes components in addition to milk-fat;

(ii) there be clear recognition of the complexity and importance of such an undertaking;

(iii) the extensive research and experimentation which must precede such a decision, and which is now begun, continue at an accelerated rate;

(iv) producers have extensive opportunity to establish the protein, lactose, and total solids-not-fat composition of the milk from individual cows well before adoption of any of these components of milk as a basis of payment;

(v) adequate notice be given of ultimate intentions and objectives in order that all concerned may have time to make appropriate adjustments and long-range plans;

(vi) change in basis of payment be considered as an integral part of the general proposals which we have made for the milk industry in Ontario.

(j) General Conclusions and Recommendations

(i) Central Testing Laboratories should be established. The Department of Health has many laboratories throughout the province and these are now being used by the Department of Agriculture under an agreement which could be extended. We have been

led to believe that there would be unnecessary cost in the establishment of separate facilities for the Department of Agriculture.

We are persuaded that the milk producers of Ontario will never be satisfied concerning the validity of tests until they are made by an independent authority. We believe that farmers are not unreasonable in their demands for assessment by persons other than those to whom they sell their product. We believe that Central Testing Laboratories would not represent an important additional cost, that a practical plan can be developed, and that the elimination of much, if not all, of the present disgruntlement and suspicion would be sufficient justification for any new expenditure likely to be necessary. Many farmers have indicated their willingness to provide financial support, and the existence of the Milk Producers' Pool would greatly facilitate such an undertaking.

(ii) The infra-red milk analyser (IRMA) holds much promise. We recommend that this machine, modifications of it, and other devices that might be superior, be studied carefully. Machines of this kind would fit logically into the scheme for Central Testing Laboratories.

(iii) The present studies into the adulteration of milk with water should be extended. The Fiske cryoscopes now located at several points in the province should be used to establish routine checking of milk samples. Those who are guilty of fraudulent actions should be prosecuted and severely penalized. This problem would disappear almost overnight if effective action were taken against those convicted.

(iv) Until well-selected facilities and well-planned procedures are available, it is desirable to continue to use milk-fat as a basis of payment with 3.5 per cent milk-fat content as standard.

(v) Sediment testing now results in the division of milk into four grades. We see no logic in, or use for, four grades. We suggest that sediment-tested milk be classified simply as acceptable or not acceptable for the purpose for which it is to be used.

(vi) At the present time there is no sediment testing of bulk tank milk on a routine basis. We understand that suitable and inexpensive equipment is now available, and we recommend that action be taken to comply with the regulations as now established, or such modification of them as may appear to be appropriate.

(vii) Resazurin reduction tests for bacterial activity now result in the grading of milk into five categories. This arrangement probably has had some usefulness—for example, in the effort to assess the extent to which the quality of milk has improved during recent years. Because of our recommendations concerning the quality of milk in the future, we suggest that here again there will be no need for so many classes.

Section 3

TRANSPORTATION

- (a) Present Conditions
- (b) Costs, Waste, and Potential Economies
- (c) Rates
- (d) Point of Sale
- (e) Pool Milk
- (f) Non-Pool Milk
- (g) Regulation of Transport
- (h) General Recommendations

Transportation refers to that phase of the milk industry which is concerned with the movement of raw milk from the producers' premises to those of the processor who converts it to its final form for sale as fluid milk or a milk product. Transportation, therefore, includes inter-plant shipments.

(a) Present Conditions

Motor vehicles transport nearly all milk in Ontario. Transportation of milk is covered by the Public Commercial Vehicles Act, and any person wishing to enter the business (except for a farmer who hauls his own milk, and co-operatives primarily engaged in trucking the milk belonging to their members) must secure a Class E licence under the Act. Few farmers haul their own milk and there are only six or seven co-operative trucking enterprises without P.C.V. licences.

The number of operators and vehicles licensed gives some indication of transportation arrangements during the last twenty years. The following figures do not include individuals and co-operatives, or certain other carriers who may haul milk in cans in addition to other freight. None of these three categories is of any great importance.

P.C.V. Class E Licences Issued in Ontario

Year ended March 31	Number of operators	Number of vehicles
1943	630	832
1948	710	881
1953	719	997
1958	679	1,036
1963	691	1,123

The above data disclose an increase in the ratio of vehicles to operators. Also, there was a significant increase in the carrying capacity of individual vehicles during the period, particularly after the adoption of bulk tank trucks in 1953.

Some idea of the degree of concentration of ownership of haulage capacity in the province may be gained from the following data:

Number of operators	Number of vehicles licensed	Total number of vehicles	Percentage of vehicles
480	1	480	45.1
116	2	232	21.8
39	3	117	11.0
23	4	92	8.7
12	5	60	5.6
2	6	12	1.1
2	7	14	1.3
1	8	8	.8
3	9	27	2.5
1	11	11	1.0
1	12	12	1.1
<hr/> <u>680</u>	<hr/> <u>1,065</u>	<hr/> <u>100.0</u>	

Notes: (1) This analysis covers only the period April 1 through October 31, 1963.

(2) The assumption was made that an owner would purchase all of his P.C.V. licences at one time.

The transportation of milk in cans is decreasing rapidly. There were 191 bulk tank vehicles in 1959 and 409 in 1963; undoubtedly the average size has increased substantially. Bulk transports operate in eighty-four of the fluid-milk markets in Ontario, and carry most of the milk destined therefor. Almost all milk for the Toronto market is carried in bulk tank trucks. The bulk transport of milk for manufacturing purposes is increasing rapidly, but no accurate data are available.

(b) Costs, Waste, and Potential Economies

In this province there is no co-ordinated direction of milk transport. Milk of varied quality is transported in tankers and cans to

fluid markets and manufacturing plants. There is duplication and overlapping of transport routes and back-hauling of milk from one location to another. Moreover, many trucks carry less than total possible loads, and are sometimes used to supplement storage facilities available at processing plants.

We believe that significant reduction in costs and waste could be achieved if there were one quality of milk, general adoption of bulk haulage, and marketing of milk in substantial quantities by the Milk Producers' Pool. On the other hand, we do not believe that total rationalization of the industry, imposed or enforced by government, is desirable. In our opinion the very great powers conferred upon the British Milk Marketing Board are inappropriate for this province.

There has been much discussion of the change in costs resulting from the shift from cans to bulk hauling. Opinion ranges greatly. Some producers claim important savings; others believe that costs have increased. There are many reasons for this strange uncertainty. Some farmers insist that the cost of bulk tank installation must be written off over the two or three years during which it will be paid for, while recognizing at the same time that the tank has a long life. Further confusion has resulted from the changes in hauling rates which came with bulk handling equipment, the incentives offered to producers to install bulk tanks, and the unwillingness of all parties to admit to any significant improvement in their financial position. No one has produced anything resembling systematic analysis of the costs involved.

We have come to conclude, but have not attempted to demonstrate, that bulk handling results in lower costs in the handling of raw milk, and that costs are likely to decrease with continued change to bulk hauling. However, the serious studies of this subject undertaken elsewhere suggest that there are limits to the economies to be achieved through the use of large tankers operating over substantial distances. We append as Part D, Section 6, Exhibit XI a summary of the results of a study of transportation costs undertaken at the University of Minnesota. This suggests the type of research that is so much needed in this province.

There are many areas in which careful study is desirable: the general nature of the costs associated with the transportation of milk and the validity of a minimum charge for each farm stop are examples.

(c) **Rates**

The Milk Industry Act provides for collective bargaining between producers and transporters, and for the filing of transport agreements with the Milk Industry Board. In practice, agreements have been filed for only a few market areas. Agreement on transport

arrangements and rates is very often informal, verbal, and made without reference to the Board. Agreements on file are usually brief documents setting out a scale of maximum rates for various mileage ranges. These rates vary considerably from market to market; the following table illustrates the variation between areas at certain selected distances for bulk handling of milk:

Maximum Rate in Cents Per Hundredweight

Market	6 miles	12 miles	18 miles	24 miles	50 miles
Toronto	28.5	28.5	30.9	34.4	40.4
Hamilton	25.5	27.5	30.5	33.5	40.5
London	19.0	21.0	25.0	30.0	—
Ottawa	24.0	24.0	27.0	27.0	—
St. Thomas	20.0	20.0	45.0	50.0	—
Lakehead	30.0	30.0	35.0	35.0	50.0
Sturgeon Falls	40.0	50.0	50.0	50.0	—
Port Hope	28.0	31.0	34.0	—	—
Niagara Falls	26.5	28.5	31.5	34.5	41.5

Explanation for some of these differences in rates may be found in the overlapping of transport routes, distances between pick-up points, volume of individual pick-ups, and road and weather conditions.

There can be no doubt that great variations in bargaining power and limited knowledge of rates charged elsewhere in similar circumstances produce inequities. The worst of these should disappear with the establishment of the Milk Producers' Pool and consequent rationalization of transport of much of the milk produced in Ontario.

(d) Point of Sale

At the present time most Ontario milk is purchased at the time it reaches the processing plant. This arrangement has long been established and reflects the belief of producers that retention of title to their product for as long as possible gives them greater control over the transporter, and greater influence on the direction of their milk. No doubt this long-standing belief had some validity when milk was shipped in cans, and particularly when the milk was converted into cheese in co-operative plants.

The point at which title to milk passes has been the subject of much confusion and uncertainty. There seem to be few references to this in legal decisions. In a 1959 decision, a Court accepted the contention that the point of sale was at the processing plant rather than at the farm, with the result that the processing plant was forbidden to transport milk without a licence under the P.C.V. Act. This

problem was resolved without difficulty by the plant agreeing to buy the milk at the farm. It could then transport its own milk without being subject to the requirements of the P.C.V. Act. It is unnecessary to have such uncertainty, and disagreement.

Whatever justification and good sense there might have been in the producers' determination to retain title to their milk to the last possible moment has long ceased to be realistic or meaningful. Bulk handling results in the loss of product identity at the farm. It is completely impossible for a producer to recover the milk that went from his bulk tank into a tanker. Moreover, he cannot direct his milk to a specific plant, except in full co-operation with those other producers whose milk has become mixed with his. This does not deny the possibility of a tankerful of milk being split between two or more destinations, but the identity of the milk produced by a particular farmer cannot be maintained.

We recommend that as a general rule title to milk pass at the time it leaves the producer's premises. This need not eliminate the possibility of a contrary arrangement under specific agreement.

(e) **Pool Milk**

One of the important responsibilities assumed by the Milk Producers' Pool should be the arrangement of transportation. This will provide a very important opportunity to eliminate waste and duplication by arrangement of truck routes and by directing the flow of milk. It is unlikely that important improvements would be possible at the time the Pool becomes active, but general objectives and policies should be identified as part of the preliminary planning for Pool operations.

The existing facilities are generally adequate for current transport needs. When duplication of routes is eliminated and careful planning instituted, there is likely to be excess transport capacity. This will exert new pressure on marginal transporters and particularly those trucking milk in cans. Changes in milk hauling arrangements should be worked out in consultation with existing transporters, and integrated with projected long-term production and processing prospects. There should be intensive studies of the possibility of savings through installation of greater storage capacity at processing plants, the use of receiving stations, and transference of milk from relatively small trucks to larger vehicles designed for long-distance hauling.

Transport studies of this kind should make use of the knowledge gained by other organizations concerned with similar problems. Transportation of petroleum products and beer have long been studied with great care, and important lessons learned. The milk

industry could benefit from what may seem to be, but is not, dissimilar experience. Although we feel that the transport arrangements established by the British Milk Marketing Board are more comprehensive than is desirable in Ontario, much could be gained from study of them.

The Pool will find it necessary to accumulate data of great variety, and to employ the data-processing facilities which have come into common use in recent years. Only with clear understanding of regional and seasonal variations in supply of, and demand for, milk will it be possible to establish efficient and satisfactory transport patterns.

In our opinion the Milk Producers' Pool should not acquire transport facilities. There are in Ontario a substantial number of privately operated milk transport vehicles, and we believe that they are quite capable of continuing to provide the required service. The Pool should be free to direct its energies to its principal responsibilities, which would include bargaining for the transport of all milk to which the Pool acquires title.

We have suggested that the Ontario Milk Commission retain ultimate responsibility for settlement of any unresolved disputes between the Pool and transport associations or individuals. We suggest also that any undue power on either side can be further controlled by continuing to allow plant operators, or individual farmers or groups of them, on a co-operative basis, complete freedom to enter into agreement with the Pool for transport of Pool milk in which they are interested. All of these forces should result in rates yielding reasonable returns to those engaged in the transport of Pool milk in this province.

At another point in this Report we have recommended that there should be provision for the sale of milk from particular breeds of cows under breed names. It is clear that segregation of such milk will require special transport vehicles, or at least special compartments in the regular tankers. This will result in additional cost. There seems to be no reason why the Pool, producers of this breed milk, and those who wish to acquire it for processing, should not enter into agreements whereby the additional cost is equitably shared between producer and processor.

(f) Non-Pool Milk

Non-Pool milk will no doubt be produced on many farms for years to come. Much, or perhaps most, of it will be shipped in cans in the early years, but we would expect that the economies associated with bulk hauling, and the preference of processing plants, would lead to important pressures to convert to bulk equipment. We would expect further that regional pressures will mount, in that fewer and

fewer can shippers will have to pay more and more to have their product transported, and that these costs would tend to become so high that milk production would cease to be profitable for them. We see no reason to prolong the change-over period, but at the same time these producers should have every opportunity for orderly adjustment.

The transport of non-Pool milk should be a matter of contractual agreement between interested parties based on the passage of title at the farm, except when specifically established otherwise. The interested parties include the producers—whether they use bulk equipment or cans—transporters, processors, and the Pool in so far as it may appear to be desirable that Pool and non-Pool milk be moved in one vehicle in order to minimize transport costs. We emphasize that all parties should have complete freedom to reach agreements, including opportunity for a farmer to haul his own milk, for plants to operate trucking facilities, for co-operatives to enter into the transport business, and for groups of farmers or processing plants to enter into relationships with the individual owners of transport vehicles or associations of them.

The rates that would evolve out of such freedom to compete should be reasonable if the Ontario Transport Board establishes appropriate rules having to do with proof of necessity, and the Ontario Milk Commission requires the filing of transport agreements and exercises general supervision over them. Our inclination here, as elsewhere, is to recommend a minimum of government participation in rate-setting, and in general control of the milk industry.

The history of trucking is such that full freedom would almost certainly result in price-cutting and waste. There is relatively simple access to the transport side of the industry in that almost anyone with a little money can acquire a truck suitable for the transport of cans. Too often in the past such people have been dazzled by the substantial flow of cash resulting from their operations during the first year or two, and have failed to recognize the true costs of operation. The result has been that after a year or two the vehicle has depreciated considerably, and no funds are available for repair or replacement. Bulk handling equipment is much more expensive than that necessary to haul cans, but the same basic danger exists. Also, we are persuaded to recommend some degree of control because of the pressures that are likely to come to bear upon can-shippers as they become fewer in numbers.

(g) Regulation of Transport

At the present time responsibility for the regulation of milk transport is divided between the Department of Transport and the Department of Agriculture.

Details of the Public Commercial Vehicles Act, and Regulations under it, are set out in Part A, Section 1 (h). Under the Act, provision is made for public hearings of applications for new licences and any interested party may appear to support or oppose the application. Any change in a licence must be the subject of public scrutiny and full details published.

The present licensing arrangements under the Public Commercial Vehicles Act tend to establish inflexibility, in that change in route or in any producer relationships must receive the approval of the Transport Board. While such approval is largely a matter of form, it does result in resistance to change. In some cases producers do not know that they have the right to change from one trucker to another, and this lack of knowledge has sometimes been used unfairly by truckers to bind producers to them..

Under the Milk Industry Act producers and transporters, or associations of them, may bargain collectively in order to determine the prices that shall be paid for transporting fluid milk, and such collective bargaining must be carried on in good faith. The Regulations under the Act contain general directions designed to keep transport vehicles in sanitary condition, to prevent damage to cans or their contents while in transit, and to prevent owners of transport vehicles from trafficking in fluid milk.

The Regulations covering the transport of milk under the Milk Industry Act appear to be reasonably designed, but they have not been generally enforced.

Although the Act and Regulations do not specifically provide for such an arrangement, in several parts of the province the Dairy Branch fieldman undertakes to provide control over transport in the sense that no producer may re-direct his milk to a new plant without the knowledge and acquiescence of the fieldman. These informal arrangements, which have not been widespread, have come into being in order to prevent producers with doubtful or rejected milk from moving it freely from one plant to another.

(h) General Recommendations

We recommend that:

(i) licensing of vehicles engaged in the transport of milk and cream continue to be the responsibility of the Transport Board, but the detailed licensing arrangements be removed in order to eliminate the rigidity associated with them, and to achieve greater flexibility and capacity to modify transport arrangements.

(ii) co-operative truckers be permitted to operate subject to the same conditions and requirements as private haulers. The transport of milk is no more than one small segment of the economic life

of this province, and co-operative transport should be as free to participate here as it is in other segments of business activity.

(iii) the Department of Agriculture continue to have responsibility for those phases of the transport activity which are directly related to the quality of milk. Regulations should include more complete control over the flow of substandard products in order to prevent rejected milk from finding its way into another plant.

The Ontario Milk Commission should be able to provide important advice and guidance to the Department of Transport and to the Department of Agriculture. The Commission should have ultimate responsibility for the arbitration and settlement of disputes over rates between transporters, producers, the Milk Producers' Pool, and processors.

Section 4

DISTRIBUTION OF FLUID-MILK PRODUCTS

- (a) Changes in Distribution Arrangements
- (b) Competition among Distributors
- (c) Competition between Distributors and Producers and Purchasers
- (d) The Results of Competition
- (e) Distribution Areas
- (f) Conclusions

Distribution is that phase of the milk industry involving the movement of milk and milk products, from the processors' premises to the point of final sale to the consumer.

This section is concerned primarily with the distribution of fluid-milk products. These products are defined in the Regulations, and include standard, homogenized, partly-skimmed, skim-milk, special milk, cultured and flavoured milks and drinks, and cereal, table, and whipping creams. The definition of fluid-milk products has changed through the years, and can be modified at any time by changing the Regulations.

(We are not concerned in this section with the many other forms in which milk comes to market, for example, as cheese and butter. These are discussed elsewhere.)

A distributor is defined as "a person engaged in the business of selling or distributing fluid-milk products either directly or indirectly to consumers". In Ontario most distributors are also processors in that they arrange for the delivery of milk from the farm to their premises, and process it into saleable products for disposal.

In 1947 Mr. Justice Wells wrote: "The key at the present time to any immediate further economies must lie in some fundamental reorganization of the distributing process", and the Agricultural Enquiry Committee saw fit to reiterate this view in 1961.

Through the years there have been many dramatic changes in the distribution of fluid-milk products. The changes that have taken place are a reflection of the very serious search for cost economies that has occurred in this country during the last fifteen years. They are not unlike similar changes easily identifiable in merchandising generally and are clearly related to the development of large retail grocery chains, and other outlets which have developed more recently.

These forces have struck at some of the long-established arrangements in the milk industry, and it seems inevitable that important changes in its structure must take place.

(a) Changes in Distribution Arrangements

In spite of the many important modifications during the last fifteen years opportunities for equally significant changes still exist.

(i) The Shift from Home Delivery

At the present time in the City of Toronto it is conservatively estimated that not more than 55 per cent of fluid milk is distributed to the consumer's door. The remaining 45 per cent is sold to chain stores and institutions, or is marketed through Jug Stores.

In order to understand this important change it is necessary to recognize the cost of home delivery. While no precise figures can be applied to all circumstances, it has been estimated that it costs something like 8c to deliver each quart of milk or its equivalent to a private residence. The cost of delivering large quantities to retail outlets is much less; we have been told that in substantial quantities, 1c to $1\frac{1}{2}$ c per quart may be kept in mind as a reasonable guide when making general comparisons.

This important difference in the cost of delivery, coupled with the vigorous competition between distributors and the ease with which milk can be brought into retail outlets, displayed, and sold, explains much of the inclination and ability of retail merchants to price milk attractively, and to use it to attract customers.

(ii) The Specialty Shop or Jug Store

In recent years there has been an interesting growth in the number of cash-and-carry grocery stores carrying a limited line of products, featuring milk at low prices in a multiplicity of containers, and remaining open for long hours every day in the year. These businesses seem to have sprung up as a result of the great size of the typical chain grocery store, and the substantial investment of time and energy necessary to purchase the few articles for which many people prefer to shop on a day-to-day basis. This trend has been assisted by the availability of relatively smaller premises in

inexpensive locations following in the wake of the rapid development of shopping plazas.

These specialty shops usually feature milk in three-quart containers, at very low prices. At the present time in Toronto, three-quart jugs of standard milk are selling at 55c—i.e., 18 1/3c per quart—while the delivered price of milk in one-quart containers is 26c per quart. This important price difference can be explained in large part by the savings resulting from moving truckloads of milk directly from processing unit to point of distribution, and partly by the store's avoidance of the costs of extending credit.

From the consumer's point of view it might be noted that there seems to be little recognition of the cost involved in making a special trip to the milk shop for attractively priced milk when no other purchases are included.

(iii) **Amalgamation of Delivery Routes**

The rationalization of home delivery arrangements has long been discussed. There is no serious doubt that important economies could be achieved if only one vehicle went down each street rather than the present arrangement which results in much duplication of mileage. Probably many who discussed such new arrangements have had in mind some formalized approach, perhaps directed by government. No such action has been taken, but there have been a number of important developments that have achieved the same effect. For example, many dairies have amalgamated. Also, in the City of Toronto, two large dairies saw fit to exchange routes, and to divide the city into two parts in so far as their distribution of milk was concerned. We have been told that they are highly satisfied with the arrangement, and that hoped-for economies have been achieved.

Amalgamation of delivery routes seems likely to result in consumer objection based either on a suspicion of monopolistic controls or on the belief that one dairy provides milk of markedly superior quality. It is true that milk in its original form may differ considerably from one farm to another, but it seems reasonable to conclude that modern techniques, cooling, transporting, processing, and delivering, along with the very great improvement and standardization of quality in milk, have done much to eliminate differences between the products available from distributors. Therefore, in so far as amalgamation of delivery arrangements would result in further economies and lower retail prices, consumers should be willing to give up choice of distributor in order to secure lower-priced milk.

More careful planning of delivery arrangements would permit distributors to give more attention to individual customers, and

provide opportunity for expanded sales of the ever-increasing range of products carried by milk delivery vehicles. These provide important opportunities for distributors to combat the present tendency to buy milk in retail stores.

(iv) **Other Distributor Opportunities**

In general, distributors have failed to provide volume discounts to household accounts. Except for the price differential on multiple-unit containers, they have charged the same price per unit for all merchandise sold, in spite of the fact that there are important economies resulting from volume sales. There have been several reasons for this behaviour. Perhaps the most important of them is the unwillingness of labour unions, whose contracts provide for unit sales as the basis of remuneration, to accept a lower rate for multiple sales. This is in spite of the fact that much of the reduction in volume of milk delivered has resulted from attractive discount prices offered in retail outlets. In addition, there has been uncertainty as to how the distributor would keep track of his final dealings with delivery-men. This does not appear to be an insoluble problem, but it has caused many distributors to hesitate to introduce discounts.

Seven-day delivery slowly gave way to a six-day arrangement, to be replaced, in turn, by the present five-day pattern. These changes took place because of better refrigeration at all stages in the distributive process, particularly in the home, and because of the evident economies to be achieved by less-frequent deliveries. We believe that such reductions were readily accepted by most housewives and there seems to be little reason why these changes could not be extended to every-other-day delivery, or a three-days-a-week arrangement. Such plans have been adopted in many markets outside Ontario with evident success. Indeed, some dairies in the United States are reported to have cut deliveries to two days a week. We recommend that these possibilities be given serious study in this province.

One reason for slow progress in Ontario seems to be that many distributors are competing for individual customers. They fear that unless all come to a uniform basis, advantages in volume, if not in profit, will accrue to those who adhere to present arrangements. There is also concern that with fewer opportunities to buy, the total volume of home-delivered milk purchased by individual home consumers might decrease. This view is opposed by others who suggest that with fewer deliveries, the consumer would purchase larger quantities on each occasion, and that the availability of greater supplies in the home might result in increased, rather than reduced, consumption. There seems to be no sure way to resolve this dispute.

There are difficulties associated with the reluctance of the unions to modify present arrangements, in that they fear either longer work weeks, with or without increased pay, or shorter work weeks with reduced pay. In any event, a change to a three-day delivery would bring important new bases of negotiation. Finally, distributors themselves fear that a three-days-a-week or every-other-day basis would result in the need for significant modification in plant operations, and in the demands placed upon management. No doubt this is true, but it seems evident that greater use of all facilities would result in significant operating economies.

It is impossible to come to final proof of the advisability of changes of this nature. However, the experience of those who have made the changes, and the arguments presented above, suggest that there is need for serious study, and that modification of present arrangements might well be beneficial to all concerned.

(v) Changes in Containers

In recent years there have been many changes in the type and size of containers used in the fluid-milk industry. At the present time nearly all sales made through retail stores are in paper cartons, with the important exception of three-quart glass jugs. Three- and four-quart plastic-coated paper containers have just appeared on the Canadian market. Home delivered milk comes usually in one-quart and two-quart glass bottles. Recently many distributors have made available three-quart jugs for home delivery, but there appears to be little determination to sell them, in spite of their present popularity.

There have been occasional efforts to introduce containers of varied shapes and sizes. The relatively inexpensive tetrahedral pack found in many European markets has not met with much success in this province. This is in part because milk so packaged is limited to containers of not more than one-pint capacity, and in part because such packages are not easily stored in the conventional manner. Some experiments have been made with an eight-quart container for home use, in the form of a polyethylene bag fitting into a corrugated paper box, but it has not gained wide acceptance. Disposable plastic containers of five-gallon capacity are now widely used in restaurants and institutions.

Containers with less than one-quart capacity are no longer important in the retail market, although they are used in substantial quantities in restaurants, automatic vending machines, factory canteens, and schools.

Paper containers are considered to increase costs of distribution, except, perhaps, in those relatively few very large plants. We have

been told that distributors in this country have little or no choice in the packaging machinery available to them, and in their source of supply of the paper to be used in the machines. Anything that could be done to increase competition in this area would no doubt result in lower costs.

Many experimental containers are being developed at the present time. Some of them will result in further savings of labour and materials, satisfy the growing consumer demand for single-use packages and minimum storage requirements, extend the shelf life of the milk, and make possible expanded sales through vending machines.

(vi) Other Developments

There appear to be important opportunities for economies in the marketing of milk through attack on the perishable nature of the product, and the very high distribution costs.

In recent years, concentrated liquid milk has been produced in limited quantities in this province. There have been many problems associated with this development. Distributors of fluid milk have been very apprehensive because of the possibility that this product, which has relatively long shelf life and about one-third of whole milk volume, might find broad acceptance for these reasons. There have been technical difficulties in producing concentrated liquid milk, and costs of production are said to be relatively high. At the present time it appears to be possible to market this product only if the milk from which it is produced can be purchased at a price below that paid for milk for fluid distribution. In spite of the advantages associated with such a product, consumer resistance to change and unwillingness to undertake the necessary addition of water have kept it from making any important impact on fluid sales except in relatively few markets: for example, in summer tourist areas where weight and perishability are usually important considerations.

There has been much speculation in recent years concerning the development of a truly sterile milk having an almost indefinite lifetime. Recent reports of such products have come from Russia, Sweden, and the United States. So far sterile milk has not been produced commercially in Ontario.

(b) Competition among Distributors

The competition among milk distributors in Ontario has been vigorous in recent years, and is likely to increase in the immediate future. One of the results of this competition has been the sizeable decrease in the number of distributors in this province. Since

1947 the number of regular distributors in Ontario has declined from 640 to 415 and the number of producer-distributors has shrunk from 237 to only 35. In the Toronto market there were 52 licensed distributors in 1947 but only 17 in 1964. Our discussions with distributors, and observation of the recent behaviour of the market, suggest that there will be even fewer distributors in the future.

Many forces have been at work. They are not unlike those which have resulted in the consolidation of business activities in many other lines of endeavour. They include the economies that result from large-scale semi-automatic processing of milk, the specialization that can be achieved in large plants, the inability of small operators to use their equipment for more than a few hours a day, and the very high costs incurred by them in an effort to produce a relatively small quantity of the increasing range of products which have become associated with the home delivery of milk. There are many other factors, such as quality of management normally found in larger businesses, the control over product quality that laboratory facilities make possible, support of a field staff able to advise farmers on production problems, ability to buy supplies such as containers in large quantities at lower prices, and the general advantages associated with concentration of economic power. It is true that a small distributor has some advantages over his larger competitors, but in a business of this kind there can be no doubt that he operates under many handicaps.

The majority of milk distributors in Ontario operate in smaller communities. New and powerful pressures are being exerted on them by emerging developments in milk distribution. In recent months there has been clear evidence that chain stores are moving toward the distribution of packaged products having their origin in major processing plants, and using the excellent transport facilities available in this province. A second and related development is the extension of the distribution of milk by major processors to existing retail outlets and new specialty shops established at low cost by local merchants in smaller communities.

These developments display clearly the power of both the chain store organizations and the larger distributors. They also display the economies to be secured through large-scale processing and packaging of milk, and the relatively low cost of transporting substantial quantities of it over long distances.

Because of the heavy costs of door-to-door delivery and the shrinking volume of home delivery sales, some distributors have been exploring the possibility of shifting delivery from their direct control to an entirely different basis whereby each route would

become the property of the driver. He would in fact operate an independent business, securing his supplies from the distributor through outright purchase. Arrangements of this kind are not new; they have been in effect for many years in the bread business, and have been in operation in milk distribution for a number of years, with evident success, in Detroit. These arrangements place greater responsibility on the owner-driver. He is no longer an employee but an independent operator, and is likely to recognize the substantial rewards that are available to superior salesmanship. He becomes an entrepreneur rather than a truck driver. From the point of view of the distributor, investment in capital equipment is reduced, and detailed supervision of drivers and maintenance of delivery vehicles are no longer required. The distributor becomes, in fact, a processor only, and as a result of this specialization may be able to achieve more efficient operations.

Distribution of milk in the future is likely to reflect some combination of the preceding developments. It seems reasonable to expect that many organizations now described as milk distributors will be required to face the intense new competition that appears to be developing rapidly. It seems probable that many of them will be unable to compete as processors of milk because of the forces already identified. It seems likely, however, that many of them may well survive as distributors of milk in the sense that they buy packaged products, delivered to them in quantity by a relatively few large processing enterprises. These distributors will continue to provide door-to-door delivery, which will no doubt remain in substantial demand in this province in spite of higher retail prices.

Developments of this kind bring important advantages, and should not be resisted unduly. The present small distributor will be able to acquire milk of good quality in the quantities he requires and to focus his full attention on a single segment of the industry. Such developments will eliminate need for replacement of obsolete processing equipment by such distributors, and facilitate direction of milk by the Pool. They represent important features of the rationalization of the milk industry in Ontario. There have been similar developments in other industries in recent years; for example, in bread, newspapers, and beer. In each case the fundamental forces have been the same: low costs associated with large-scale production, rising costs of distribution, and high-speed, low-cost transportation, as examples.

These are some of the problems being faced by distributors at the present time, and we have tried to set down what we consider to be the probable course of events through the next few years. We do not wish to suggest that all small distributors will disappear, nor do we consider this desirable. There are many people engaged in the

processing and distribution of milk on a small scale, and there is a substantial investment in capital equipment of every kind. We believe there will be a period of gradual change during which individuals will find other employment, equipment will wear out, and new arrangements will be established with due regard to all the circumstances of the situation.

(c) Competition between Distributors and Producers and Purchasers

The competitive strengths of distributors and those with whom they bargain—i.e., producers and those who purchase their products—are important aspects of the milk industry. Study of past arrangements and the relative strength of the competing parties provides useful guidance for the future.

(i) With Producers

At the present time the Milk Industry Act, Section 23, provides that producers of fluid milk, or an organization of producers representing them, may bargain collectively with distributors. Regulation 424 establishes the Ontario Whole Milk Producers' League as the bargaining representative of the producers. The Regulation identifies 225 markets and areas, many of which are grouped for bargaining purposes, so that there are, in fact, about 145 collective bargaining agreements and 30 Milk Industry Board awards in the province.

The relative bargaining strength of producers and distributors was discussed at some length before this Committee. The Ontario Milk Distributors' Association stated in their brief to us:

"The distribution of Ontario fluid milk markets and the large number of distributors involved is such that monopolistic control to exploit (either the producer or the consumer) would be difficult. The operation of producer associations as bargaining agents for producers has removed any possibility of exploiting fluid milk producers, indeed, perhaps the collective bargaining power of fluid milk producers, acting in concert under the Ontario Whole Milk Producers' League, have enough market control to exploit distributors and consumers."

On the other hand, we have heard many statements from producers describing situations in which one distributor, the sole licensee in a distribution area, is able to bargain advantageously with the producers in that area because there is much greater milk production than is necessary for the needs of the fluid-milk market, and because many producers are anxious to secure the better prices normally associated with the fluid market.

Weighing all of the evidence, it has been difficult for us to come to any particular concern for the distributors of this province in

their relationship with producers. If, in fact, distributors were seriously concerned about their bargaining position, they would have used their Association for collective bargaining instead of acting separately. In general terms it appears that the bargaining advantage has been on their side.

In some markets there has been competition among distributors in their efforts to secure milk from better producers. They have competed also for milk produced by Channel Islands cattle. This competition has taken many forms. Perhaps that most frequently mentioned had to do with the percentage of the total milk supplied that has been paid for at the established top price for that market. Some distributors have competed by offering assistance in the installation of bulk tank equipment; others have made attractive arrangements of one kind or another in determining the price to be charged for transportation of milk. By and large, however, distributors have had no difficulty in securing a supply of raw milk without serious competition among themselves.

One of the interesting aspects of distributor-producer relationships is the spread in the prices to be found in the milk markets of Ontario. During the summer of 1963 the range of agreed prices per cwt. was from \$3.80 to \$6.12, a difference of \$2.32. While the range of prices is wide, it should be noted that a substantial portion of Ontario fluid milk is purchased at a price close to the formula price level, presently \$5.29.

It is our recommendation that in the future the price of "A milk" for fluid purposes in southern Ontario should be established by collective bargaining between the Pool and distributors under the general supervision of the Ontario Milk Commission. If all three parties are well informed, and intelligent effort is made to achieve well-chosen long-range goals for the industry, satisfactory pricing of raw milk should result.

(ii) With Purchasers

Milk distributors sell their products on two bases, retail and wholesale. Wholesale sales, which have become increasingly important in recent years, are made to retail stores, restaurants, and institutions. Chain-store sales have increased with great rapidity during the last few years, and will continue to be an important factor in determining the future of the distribution side of the milk business in this province. Retail sales by distributors may be divided between products delivered at the home and those sold in their stores and dairy bars. The latter form of retail activity has increased considerably in recent years.

In communities where only one distributor is licensed, there is important evidence of new competition, resulting for the most part from the sale of fluid-milk products to local retailers by distributors who are located at some distance. The purchaser arranges for transportation and in so doing does not in any way contravene milk industry laws or regulations. There is much evidence to suggest that activity of this kind will increase rapidly in the immediate future. Such arrangements are encouraged by processors who recognize the low costs associated with marginal processing and distribution. Some distributors appear to be convinced that present circumstances make it possible for them to reap greater benefits in remote markets, where competition is limited and prices high, than from extended effort in the own community.

Distributors compete in many ways when two or more of them are licensed to do business in a given community. The most important basis of competition between distributors is in the pricing of their products. This may surprise those who have noted the general uniformity of retail prices for milk products in a given market. The real price competition is at the wholesale level, and particularly for the large wholesale accounts. The chain grocery stores and large institutions are in a powerful bargaining position, and no doubt are able to secure the maximum price concessions. Price competition at the retail level has been very evident in recent years with the arrival of Jug Stores, which have been leaders in establishing prices. This competition brings pressure upon the wholesale prices that other retail stores have been willing and able to pay.

Price competition is not limited to the quoted wholesale price. It includes discounts, which vary greatly but are generally in proportion to volume of purchases. The provision and maintenance of refrigerating and other equipment without charge represents price competition since such arrangements result in a reduction in the net cost of fluid-milk products to the retailer. Such competition includes the products often given away when new stores are opened, when cream or some other dairy product is given away with the purchase of milk, or when a price war results in the sale of a product at an unreasonably low figure.

Competition related to milk composition is not easy to assess. At our public hearings there was discussion of consumer ability to detect minor differences in content, flavour or colour, but no general agreement was evident.

Few serious studies have been made of consumer preferences. A summary of the conclusions reached in one of them undertaken at the University of Arizona is included as Part D, Section 6, Exhibit

XIII. We cannot come to final conclusions based on the limited evidence which has come to our attention. We suggest that this is an area in which further research would be very helpful in planning the future of the industry.

The position of Channel Islands milk has been much discussed. Those who produce and distribute it claim that it is of superior quality, and many consumers appear to be convinced of this.

The service offered by distributors is another way of securing competitive advantage. The offering of credit is attractive to some householders, the delivery of milk at some distance from the street or to a third-floor apartment may sometimes become an inducement to the consumer, and the range of products, dairy and non-dairy, that are available on the delivery wagon is attractive to many more. At the wholesale level, service competition is found in the extent to which competing distributors are willing to relieve the store operator of handling costs, to take back products that do not move quickly, and to provide special identification, that is, the name of the retailing organization on the milk cartons. Some of these concessions become matters of price competition.

As in other businesses advertising presents opportunity for competitive advantage, although this is not an important aspect of competition between individual distributors. Advertising of Channel Islands milk has no doubt been important in establishing a differentiated product. Most of the advertising done by the milk industry is institutional in nature and unrelated to competition between distributors.

(d) The Results of Competition

We have described the competition which affects distributors and suggested that it should continue. Here are some of the financial and legal implications.

(i) Sale of Fluid Milk in Three-Quart Containers

The current price in the Toronto area of 55c for a three-quart jug of standard milk appears to be a source of anxiety to a number of people who have spoken to this Committee. Milk drivers are concerned with possible loss of employment in face of the declining volume of milk sold by home delivery. Distributors are concerned over reduced profit margins as three-quart jugs make up an increasing percentage of Toronto's total fluid-milk sales—about 28 per cent in August 1964, compared to 18 per cent a year earlier. Producers are concerned that because of the lower profit margins, pressures will be exerted in due course to lower the prices paid to them for milk, especially if price competition is intensified. Consumers have been

largely silent on the matter and must therefore be considered to be pleased with the present arrangements.

The general inference has been that milk in three-quart containers is sold below cost or as a "loss leader". Under the Combines Investigation Act, Section 33A provides that "Everyone engaged in a business who engages in a policy of selling articles at prices unreasonably low, having the effect or tendency of substantially lessening competition or eliminating a competitor, or designed to have such effect, is guilty of an indictable offence and is liable to imprisonment for two years."

The Restrictive Trade Practices Commission held a hearing in Ottawa in December 1963, concerning an alleged combine relating to the sale and distribution of milk in the Ottawa area. As a result it was alleged that there had been sale of milk in the Ottawa area in 1961 at unreasonably low prices. The Commission's report, dated September 1964, has not yet been dealt with by the Minister of Justice.

The only other inquiries under this Act concerning milk which have been publicly reported in recent years relate to a situation in Western Canada concerning evaporated milk, another concerning the manufacture of ice cream in the interior of British Columbia, and a third concerning an alleged combine among the suppliers of fluid milk in Toronto in 1959. In each case it was held that the evidence did not disclose violation of the Act and the inquiry was discontinued. The official report of the Toronto inquiry reflects the policy and attitude of the Department of Justice and is reproduced as Part D, Section 6, Exhibit XV.

Private citizens are free at all times to bring information indicating a forbidden practice to the attention of the Minister of Justice. We are not aware that any other complaints concerning milk have been laid under the Act.

The aforementioned 55c price in the Toronto area appears to have been set by The Becker Milk Company Limited when it began operations in the spring of 1957, and that company's price has remained unchanged, we have been told, since that time. With brief exceptions, other large retailers have sold at this same price. It is interesting to note that this price maintenance has been achieved despite increases during the period in the price of fluid milk to farmers totalling 57c per 100 pounds, equivalent to about 4½c per three-quart jug.

Becker's now sell direct to the consumer through some ninety stores in the Toronto area, a growth which in itself might indicate that the operation has met with financial success. Appearing before

this Committee at a public hearing on August 8, 1963, Mr. Robert Lowe, President of that company, commented:

"... we are one dairy that has no retail routes and we are operating on the three-quart jug and we are making a profit."

We have since that time seen evidence to indicate that the Becker operation is profitable. However, it should be remembered that these stores sell, in addition to milk, general grocery items, cigarettes, ice cream, and soft drinks. Any attempt to measure the profitability of sales of milk alone involves making arbitrary assumptions as to allocation of the company's expenses between milk and other items. Indeed, it can be argued that such an allocation can have no real basis since in fact no store sells only milk, and that over-all profitability is the only true measure. Nevertheless, at our request the company's auditors prepared an analysis of the operations for the latest fiscal year, which on the basis of certain necessary assumptions as to expense allocation, indicated that sales of milk were profitable.

Other dairies in Toronto supplying chain and other retail outlets must supply jug milk at wholesale prices sufficiently low to permit the retailer to resell at the prevailing 55c price. Based on limited review the wholesale price for large customers seems to work out to about 50c per three-quart jug, which would give the store a margin of about 9 per cent on its selling price. It would appear that this price covers the distributor's material, processing, and direct delivery costs, but makes no contribution to selling and administrative expenses or profit. The continuing shift in sales volume from smaller containers to the three-quart size, therefore, has a depressing effect on distributor earnings.

(ii) Distributors' Operating Results

The Committee obtained audited financial statements for five years from twenty dairies in representative communities. Included were dairies in small towns, medium-sized dairies, and large multi-unit operations. Widely varying characteristics were observed in the companies selected, such as operations outside Ontario, varying accounting policies, and income from non-dairy sources. Thus, it is not possible to use the reported results as an absolute measure of the profitability of operations. However, it can be stated that with one exception these dairies operated at a profit for most of the five years reviewed. As in other industries in the province, there were wide variations in the range of profits.

(e) Distribution Areas

The Milk Industry Act provides in Section 29 that the Milk Industry Board "may issue to a distributor a licence to sell or distri-

bute fluid milk products in any designated distribution area or part thereof . . .", and distributors are prohibited from doing business in any other area. This provision reflects the licensing and control of distribution which was established in the mid-1930's. Presumably the intention was to curb uneconomic activity and to eliminate much of the overlapping of distributor services that had long been a problem in the industry.

Through the years each licence has included a detailed description of the area in which the distributor was authorized to carry on business. Many of these descriptions are lengthy indeed. For example, that for the Toronto distribution area runs to about 800 words. Few distributors have exactly the same distribution areas.

During the last fifteen years there have been many important technological changes such as refrigeration, transport, and paper packages, and moreover, there have been important developments in marketing arrangements; for example, the very important increase in the sale of fluid-milk products through chain stores. These developments have extended the area of economic operations for individual distributors. They are undermining the former stability of the sheltered markets and restrictive distribution areas which have been so characteristic of the milk industry in this province.

At the present time there are approximately sixty-five urban distribution areas in which a single distributor has sole marketing rights. The possibility of abuses as a result of present arrangements has been limited somewhat by the ease with which consumers can secure milk products from neighbouring markets. In addition, there has been growing infringement of established distribution areas. In some instances, there has been no complaint from those whose rights were violated and in others where complaints were lodged no effective action was taken by the Milk Industry Board.

Through the years there has been gradual merging of distribution areas. This has come about in part through amalgamation of dairies and joining together of established licences. The Milk Industry Board's general inclination seems to have been to extend distribution areas wherever possible, although it has also refused requests in face of the opposition raised by those with vested rights. In 1961 the Board appears to have come to the conclusion, as a result of the large number of applications for extended privileges, that the area close to Lake Ontario, from Niagara to Oshawa, should be established as one zone. After extended study the proposal was abandoned because of strong opposition from many distributors within the area.

Further evidence of the general course of events is furnished by the establishment of extensive distribution areas around Hamilton, London, North Bay, Toronto, and Ottawa, as set down in Schedule 7 of Regulation 432. During 1964 the Milk Industry Board considered fifty-seven applications for extension of distribution areas. Twenty extensions were granted. The Board's Secretary informed us that there were other applications which were withdrawn because this Committee's Report was being prepared.

The consolidation of distribution arrangements was the subject of much discussion at our public hearings. It was clear that many small distributors were having a difficult time, and that amalgamation of activities in adjoining areas was under serious discussion.

The Ontario Milk Distributors' Association presented a substantial brief to this Committee, and we entered into extensive discussion of it. The question of the elimination of distribution areas was not discussed directly and openly in the brief, but the over-all implication was clear.

We discussed this subject with Mr. R. H. Clark, then President of the Ontario Milk Distributors' Association, and with Mr. W. A. Forsyth, who succeeded him in that office, in an effort to compare the views of the Association as presented in the brief with those of individual members. Mr. Clark made clear that the elimination of distribution areas in this province was a very contentious point, that there was disagreement among the membership, and that the views expressed in the brief were "placed there because there was a group of people in our Association attempting to present to you our opinions of the best long-term issues for our business. A lot of our members will object to it. We think this was a move that will be best for our industry."

It was Mr. Clark's opinion that consolidation of distribution areas would result in a reduction in the number of small distributors, that many who would continue to operate would do so in a different way, that many of them would cease to process milk, and that "if I had to speculate, I would say they would probably make more dollar return that way than they are making now." He also offered the opinion that the majority of the members of his Association would be opposed to the elimination of distribution areas, and stated, "I think the main objection . . . is brought about by part of the membership who are asking to maintain a present situation that results in their operation being free from outside competition." He added that while this would represent a majority of the *members*, "on the other hand, a majority of the *volume* in the Province will support this brief."

Mr. W. A. Forsyth of Owen Sound suggested that small distributors would be disturbed by the contents of the Ontario Milk Distributors' Association brief, but added, "I would say that the brief is beyond the study or the understanding of a large percentage—a very large percentage—of the small distributors."

In his opinion the majority of the members of the Association were inactive, and had no part in the presentation of the brief, relying upon others to present their views. Mr. Forsyth stated that many small distributors "are wondering, or maybe afraid of what might happen if territorial boundaries were removed". It was his opinion that small distributors reading the Ontario Milk Distributors' Association brief would not realize that, if its recommendations were adopted, marketing areas would probably be eliminated.

The Committee discussed this same problem with Mr. J. L. Burrows, of Briars' Dairy in Sutton. Mr. Burrows served as a member of the Milk Control Board from 1952 to 1957, and was President of the Ontario Milk Distributors' Association in 1951. It was his view that the elimination of distribution boundaries would result in the disappearance of most small dairies. He suggested that the trend toward amalgamation through buying out of small dairies is the best and fairest method to open up territorial barriers, and that the present orderly decline should be allowed to continue. It was his opinion that most small distributors would not detect anything except neutrality in the O.M.D.A. brief, and in fact they relied on the O.M.D.A. to present a neutral view on the subject.

We recommend that action be taken to move toward the establishment of all southern Ontario as one distribution area. We have come to this conclusion as a result of study of developments in the milk industry during recent years, the trends clearly evident in this province, and the experience of other jurisdictions such as Michigan and Minnesota. The establishment of one distribution area would be a desirable parallel to the development of the Milk Producers' Pool. It would permit important economies as a result of centralization of processing facilities, and the establishment of large-scale distribution arrangements.

We suggest that progress should be made in a series of well-defined steps, careful assessment being made at each stage. Perhaps four stages could be identified:

(i) Notice of intent to move toward elimination of distribution areas should be given. It should be made clear in this announcement that on a given day, perhaps one year thence, specific action would be taken. This interval should permit study by individuals and interested organizations. It should result in consolidation of many undertakings, and permit intelligent planning for future operations.

(ii) On the date to which reference has just been made, there should be some substantial movement toward larger areas. We suggest, for example, the extension of all distributors' licences to all parts of each county in which they have operating privileges. The result of this would be to establish sizeable zones around major cities, and these would serve as important guides in planning the next step.

(iii) At an appropriate time there should be a further extension of the distribution areas. At this point a division of the southern part of the province into perhaps five areas might be appropriate. During Stage (ii) and Stage (iii) there should be an orderly extension of the activities of those distributors remaining after consolidation of existing licensing rights.

(iv) The final action would be to declare all southern Ontario one distribution area. Although it is not possible to predict with accuracy the time at which this would be appropriate, it might well be that this could reasonably coincide with the declaration of the Pool's maturity.

Supervision of the entire development would be a responsibility of the Ontario Milk Commission.

We have already noted the fears expressed on behalf of small distributors. Others have been concerned that undue economic power would fall into the hands of a small group of large distributors operating on a province-wide basis.

This matter was discussed at a public hearing with Mr. R. H. Clark, speaking as President of Clark's Dairy in Ottawa. He stated that he personally was not particularly concerned over this prospect, and added, "I do not think that just because we open Ontario it is going to immediately create enormous chain companies." It was his further opinion that, "you either perform a service and sell your product, or you get out of business."

(f) Conclusions

Our examination of the milk industry leads us to conclude that there has been a very high degree of competition, and that this is not likely to diminish to dangerous levels in the foreseeable future. We cannot believe that there is any serious threat of monopolistic control in the hands of a few distributors operating on a province-wide basis. We have every confidence that a substantial number of well-established distributors will continue in business. We have already drawn attention to the growing strength of specialty milk shops, and to the place they seem likely to take in this community. Retail chain stores compete vigorously in many products, including

milk, and there is reason to believe that they are inclined toward fuller participation in the merchandising of fluid-milk products. We have come to believe that active competition among distributors is the best guarantee of efficiency in milk distribution, and of reasonable prices to consumers.

This Committee believes that wholesale and retail prices for fluid-milk products should be allowed to find their own level in response to changing market conditions.

We have no inclination to recommend control over retail prices. Such controls are incompatible with the free market economy which presently exists in this province. Moreover, the unhappy experience in other jurisdictions suggests that controls are impracticable except in time of national emergency.

Dr. Leland Spencer of the New York State College of Agriculture, writing of "A Half-Century of Significant Developments in the Distribution and Pricing of Market Milk" as long ago as 1956, stated:

"At one time, nearly all of the states with milk control laws fixed resale prices but this phase of price regulation aroused much controversy. Serious difficulties were experienced in trying to enforce the minimum prices fixed for wholesale transactions, especially in markets where the dealers' buying prices were not effectively controlled."

Destructive competition in its worst forms should be controlled by action taken under the Combines Investigation Act as at present.

Section 5

CONSUMERS, CONSUMPTION, AND RETAIL MARKETING

- (a) Position of the Consumer in the Milk Industry
- (b) Consumption of Dairy Foods
- (c) Inadequate Disclosure of Information to Consumers
- (d) Changes in Retail Marketing Methods
- (e) More Effective Marketing of Milk and Milk Products
- (f) Fallout Contamination

We are concerned in this section with the whole range of milk and milk products. All residents of Ontario consume milk in one form or another, and have a direct interest in the general welfare of the dairy industry.

The Committee was surprised at the slight interest displayed at its public hearings by consumers and consumer interest groups. Those who appeared confined themselves to mild generalities, with the exception of the Voice of Women who presented careful and authoritative comment concerning the dangers attendant upon radioactive fallout. There was no strong protest concerning any aspect of the dairy industry. All of this is in strong contrast to the representations made to Mr. Justice Wells and reflected in his 1947 Report. We have come to conclude that consumers and their representatives are generally satisfied with present arrangements in the milk industry. Probably the change in behaviour reflects release from wartime tensions, and the much higher general level of income in this province today than prevailed in 1947.

In our public hearings there was a clear reflection of the concern of many producers and most processors and distributors for the welfare of the consumer. There seemed to be a general recognition of the interrelated interests of those at various levels within the industry. While we note this happy manifestation of broad under-

standing, we must also record the failure of some individuals to recognize fundamental truths. We were told, for example, that an increase in the retail price of 2c or 3c per quart would be accepted gladly by consumers if they were told that this was necessary to permit producers to achieve a reasonable reward for their efforts. We cannot believe that price and demand are so unrelated, or that many consumers have any deep concern for the welfare of producers, processors, or distributors.

There has been a gradual decline in the total consumption of milk per-capita in Canada over the years. The average consumption of some dairy products has increased, while that of others has decreased. (See Part D, Section 5, Table 21.) These changes reflect the concern of many over fat intake and a growing recognition of the dangers of excessive food consumption.

We have concluded that, generally speaking, consumers are not well informed about milk and milk products. This is partly because they lack sufficient interest in diet or health matters to study what they consider the complicated question of the composition of milk and partly because of conflicting opinions concerning milk-fat and cholesterol. Dangers of fallout contamination publicized in recent years have been disturbing. Also, there has been inadequate disclosure of information concerning the composition and grade of many products which makes it difficult for consumers to come to intelligent decisions.

(a) Position of the Consumer in the Milk Industry

There has been much dispute concerning the importance of consumer preferences in the milk industry. Many of those concerned with the processing and distribution of dairy products have stated that their behaviour is dictated by the attitudes and preferences of those who buy the finished product. Consumers, on the other hand, very often feel that they must take what is offered to them, and that too little attention is paid to their true concerns. Both points of view have some validity.

In the long run, consumer preferences are of very great importance and must be recognized by those concerned with milk and the direction of it into its final forms. In the short run, the consumer appears to be surprisingly tolerant and willing to accept decisions made by others. All of this has its most important significance when related to the quality of milk and milk products over a long term. While milk products of inferior quality may not be quickly rejected, they will not be consumed in the quantities which would otherwise be demanded. Moreover, superior products from other jurisdictions will inevitably gain acceptance unless artificial barriers are erected.

The following table is a general guide to the absolute and relative importance of milk in its various forms in Canada in 1963:

Per-Capita Personal Expenditures on Consumer Goods and Services	\$1,441
Per-Capita Expenditure on Food	\$ 332*
Per-Capita Expenditure on Dairy Products (including butter)	\$ 52†
Estimated Breakdown of the \$1 per capita Weekly Expenditure on Dairy Products	
Fluid Milk54
Butter24
Cheddar Cheese07
Process Cheese05
Ice Cream05
Canned Milk02½
Powdered Skimmed Milk02½
	<hr/>
	\$1.00

* 23% of total consumer expenditure on goods and services.

† 15½% of total outlays for food. (The figure of 15½% is based on the weighting of dairy products and butter in the Consumer Price Index.)

The consumer is free to choose between milk products and an almost endless array of the other foods and beverages available to him for nourishment and enjoyment. These alternative sources of sustenance compete vigorously for attention and acceptance by consumers.

Many producers and those responsible for the sale of milk and milk products appear to misunderstand the attitude of consumers toward their products. Their distorted impression seems to have evolved out of several long-standing considerations. From earliest days milk has been an important food in this province, in part because of the very great importance of agriculture. It has been repeated over and over again that milk is the nearly perfect food, the natural food, and the cheapest source of the best protein. Those who promote the sale of milk have come to assume, too often, that milk must inevitably and forever continue to be a vital source of nourishment. These attitudes have been seriously challenged in recent years by those who are engaged in the development of products which compete successfully with milk products, either because they are legitimate substitutes for many of the essential components of milk, because they offer similar ingredients at a lower price, or because they are presented more vigorously and attractively.

The consumer's emotional attitude toward milk is of interest and importance. It may result in somewhat irrational responses to

price changes. An increase of 1c per quart in the price of milk has on many occasions led to a public outcry totally unjustified in the circumstances, and not often observed as the result of increases in the price of other foods.

The margin of profit available to processors is a very small percentage of the total selling price, and an increase of 1c per quart is relatively great. Despite this, processors tend to refrain from increasing prices until profit margins have shrunk to very low levels, in part because of their awareness of the usual response of consumers. At the same time they seem inclined to take advantage of every possible opportunity to justify price increases.

The consumption of milk appears to be a matter of habit in an important degree. An example of this is the unwillingness of some children to consume whole milk when from earliest days they have drunk milk having a reduced fat content. The habit-forming characteristic is well recognized by most of those who urge the establishment of school milk programmes. Attention has been drawn by others to the long-term results that are likely to follow the current and widespread lack of enthusiasm for cream and milk of high fat content.

(b) Consumption of Dairy Foods

(i) Past Consumption

Changes in consumption patterns are of great interest to those who undertake a study of the milk industry, and of great importance to all concerned with the direction of it. The data available at the present time are far from satisfactory or conclusive. Uncertainty is clearly demonstrated by recent significant changes in the Dominion Bureau of Statistics figures for total milk consumption in Canada.

For Ontario, the data concerning the consumption of milk products are less than informative; for example, it is impossible to determine the source of cheese consumed in this province.

Per-capita consumption of dairy products and trends in consumption are of very great significance when attempting to predict future behaviour in the industry. The best figures that we have been able to compile are set out in Part D, Section 5, Tables 21 and 22.

These data reveal some interesting similarity between the Canadian and United States experience. In the two countries post-war trends have been similar, in that there has been a significant decrease in the apparent consumption per capita of fluid whole milk, evaporated milk, and butter. There have been increases in the consumption of cheese, non-fat dry milk (skim-milk powder), and margarine. The estimated per-capita consumption of milk products

in some countries where milk is an important article of diet is set forth in Table 22.

(ii) Projected Consumption

Estimates of the probable future demand for milk and milk products cannot be made with great confidence; past data are incomplete; at the present time important changes are in progress and many innovations of even greater significance are likely in the future. As a result long-term projections are likely to be of limited accuracy.

Our general conclusion based on study of available data and best opinion is that per-capita consumption is likely to decline slightly during the next twenty years. However, the rate of decrease in per-capita consumption to 1980 is likely to be less than that which has been experienced during the last fifteen years. These estimates seem to be supported by similar projections for the United States. This forecast may appear unduly pessimistic to many people in the milk industry, but it should be recognized that increased personal income above present levels is likely to result in greater expenditure on so-called luxury foods rather than in consumption of staples such as milk.

Assuming the foregoing, it must follow that any increase in total demand for milk products will result from increase in population. This prospect could be modified by extensive and imaginative promotional efforts. The usefulness of this conclusion will also be affected by changes in consumer preferences resulting from development of new substitutes not yet identified.

(iii) The Nature of Demand

Too little is known of the nature of the demand for milk and milk products. Some of those who appeared before the Committee were inclined to believe that changes in the price of fluid milk brought little long-term modification in the demand for it, though it was generally agreed that this was not true of most milk products or substitutes for them. The recent increase in the consumption of butter has been attributed by most people to changed government policy which resulted in a decrease in cost to the consumer.

We are persuaded that consumers will use more milk products if prices are reduced, but that there are narrow limits to the magnitude of such increases. In the same way, we believe that consumers will buy less if retail prices are raised significantly. Much study could profitably be devoted to the nature of consumer demand for milk, milk products, and other foods.

(iv) The Changing Composition of Demand

Earlier in this section we presented some analysis of the changing demand for milk products, and have commented briefly upon them. There are other shifts that should be noted.

In 1960 milk having 2 per cent fat content constituted about 11 per cent of total fluid sales in Ontario. In 1963 this had increased to 20 per cent of total fluid sales. (See Part D, Section 5, Table 19.) This is in strong contrast to the experience in other markets such as British Columbia, Michigan, and the United Kingdom where the sale of 2 per cent milk is negligible.

This shift in emphasis from fat content to the non-fat constituents in milk is reflected in the almost total disappearance of the sale of high-test milk in this province. This change was stimulated initially by warnings of the possible dangers associated with cholesterol.

The traditional dairy products are fluid milk, cream, butter, and cheddar cheese. There are some relatively new milk products, such as skim-milk powder, concentrated liquid milk, and reconstituted products, which compete with them. In thinking of long-term demand, there should be clear recognition of the growing use of vegetable and other oils, and the many ways in which they can be used in products that compete directly with milk products. The degree of success that will be achieved by these competing products will be determined by relative price, and the skill with which all concerned seek and gain consumer acceptance through maintenance of quality advertising, and the other promotional methods familiar to the market-place.

(c) Inadequate Disclosure of Information to Consumers

We have come to conclude that the public is very often poorly informed concerning the weight, contents, origin, and quality of many milk products. Moreover, the information that is provided is sometimes set down in terms almost unintelligible to the average consumer, and very often in print too small for easy reading. Consumers must be held partially responsible for this condition in that they seem to us to have displayed little concern, and less determination, to achieve more informative labelling.

Despite provincial and federal legislation to safeguard the interests and welfare of consumers of dairy products, consumers are not always adequately informed about the quality, contents, and character of the dairy products that they purchase.

(i) Butter

Butter can be manufactured either by churning or by the newer

method of continuous processing. Present labelling generally does not distinguish between these two methods. Consequently, consumers who may prefer butter made by either one method or the other—because of texture, for example—can seldom make this choice.

Surplus butter is often refined and stored in the form of butter oil. Some of this butter oil is remanufactured into creamery butter, which is then labelled and sold simply as butter. Thus, the consumer sometimes is misled as to the origin of the butter he buys. Labelling should differentiate between butter made from butter oil and that made from cream.

(ii) Cheddar Cheese

Ontario produces three kinds of cheddar cheese, heat-treated, pasteurized, and raw-milk. Present packaging does not show the consumer which of these three kinds he is buying. As a result, consumers who prefer raw-milk cheddar must rely heavily on their experience with brand names. It would be desirable to have consumer packages labelled as to type of cheese.

The grade of cheddar cheese is not marked on consumer packages. This creates the erroneous impression that all cheddar sold in Ontario is of the same grade. Consumer packages should be labelled as to grade in the same way that butter is labelled.

(iii) Other Cheese

Ontario produces a variety of specialty cheeses—e.g. Gouda and Swiss—which are quite similar to imported types. Though imported cheese is required to be labelled as such, it is not always apparent to the consumer whether he is buying an imported or a domestic cheese, largely because of the inconclusive description on domestic packages.

(iv) Reconstituted Milk

Reconstituted milk is that made by mixing powder or concentrates with water. Where milk has been reconstituted by distributors for sale to consumers, it should be clearly labelled as "reconstituted" so that the consumer knows what he is buying.

The consumer normally expects to be served standard fluid milk in public restaurants and other eating places. Where reconstituted milk, 2 per cent, or skim-milk is served instead, this should be made clear. This could be done by a note on the menu or an appropriate placard in full view.

(v) Concentrated Liquid Milk

This product is sold in Ontario by one company on the basis of net weight, whereas fluid milk is sold on the basis of net contents or

volume. The package contains 32 ounces of concentrate by weight; when water is added as directed, about 90 fluid ounces of reconstituted product results. Most consumers appear to believe that they have 96 fluid ounces.

(vi) Paper Packaging

Since the consumer cannot easily determine how much a paper carton of milk contains, he relies upon the label as an accurate measure of the net contents. A recent survey by the Consumers' Association of Canada revealed sufficient variations in the contents of paper cartons of milk to suggest that controls and enforcement have not been adequate. We have been informed that routine checks are now being made.

Many paper packages leak. This is usually the result of failure to use sufficient wax, and the remedy is well within the control of processors.

Consumers often complain about pieces of wax found in paper-packaged milk. Though wax may not be a health hazard, it is a nuisance. Milk processors might profitably study this problem and attempt to provide a better package for consumers.

(vii) Non-Dairy Substitutes

In recent years many new products have been developed. With the wide range of non-dairy substitutes now available, the distinction between these substitutes and dairy products can easily become blurred in the minds of consumers. Consumers tend to associate new products with the traditional dairy product for which they can be substituted. Several well-known companies generally regarded by the public as dairy enterprises have associated their name with products not of dairy origin. These company names on the label of the substitute tend to lead the consumer to think of the substitute as a dairy product.

Dairy and substitute non-dairy products, such as butter and margarine, or whipping cream and dessert toppings, are frequently displayed side by side, or even mixed together in a counter section. This juxtaposition and lack of clear identification of product differences leave the interested consumer confused, and dissuade others from the making of intelligent decisions. There are some Regulations designed to eliminate difficulties of this kind but they are far from effective.

(viii) Miscellaneous

There should be clear identification of skim, 2 per cent, standard, and special milks. At the present time many labels do not establish the fat content in a way that is immediately apparent to the pur-

chaser. The arrangements in some United States jurisdictions are very much more effective.

The attitude of the United States Food and Drug Administration toward misbranded vegetable oil products is instructive. The Administration has made clear that there will be legal action if vegetable oil products are described as "polyunsaturated", and therefore, implicitly or otherwise, are represented as effective in treating or preventing heart or artery disease. The Administration has concluded that the public is misled by "low cholesterol" claims, and made clear that there must be revised advertising and labelling, because it "cannot tolerate promotional material which encourages the public to engage in do-it-yourself medical treatment of potentially fatal ailments".

The Department of National Health and Welfare has recently announced the formation of the Advisory Council of Canadian Consumers. This has been described as a formal medium through which the federal government can be advised of consumer interests. We suggest that this new Council might see fit to direct some of its attention to the matters we have just mentioned.

(d) Changes in Retail Marketing Methods

During recent years there have been many important modifications in the methods employed to market milk and milk products. Many of these have been discussed at other appropriate places in this Report.

Some efforts have been made to create containers having more attractive design, greater utility, and appealing shape and colour. It seems desirable to suggest that much more can be done to create packages that will appeal to the imagination and good taste of consumers. Distributors can do a great deal to compete more effectively with those non-dairy products upon which so much skill in design is lavished.

It was suggested to the Committee that the date of packaging should be recorded on all retail packages of milk products. We are not inclined to support this proposal because we believe that this would be misleading to many people. For example, it might easily be assumed that milk packaged the day before was no longer usable. This, of course, is not a reasonable conclusion. Further, we reject this suggestion because there are many considerations that are very much more important in the provision of high-quality products.

(e) More Effective Marketing of Milk and Milk Products

It is our opinion that the Ontario milk industry, taken as a whole, has been unimaginative and uninspired in seeking and sup-

porting effective means to extend the markets for its products. There appears to have been a firmly established belief that "milk is irreplaceable". Many people in the industry seem to have made the assumption that milk and milk products would sell themselves, and have paid little heed to competitive substitutes, changing dietary fads and preferences, and the buying habits of consumers. In general, the industry has been slow to develop new products, to undertake promotional activities, and to initiate essential market research. This passive attitude and lack of effort was well described by Mr. A. E. Gignac, President, Purity Dairies Limited, Windsor, at the 1963 convention of the National Dairy Council:

"I suggest to you in the Dairy business that we had a free ride for many, many years. We were dealers in nature's most nearly perfect food. Our product was a must in every household, and the only problem was for the housewife to get enough rich dairy products because it just wasn't possible to drink or consume dairy products in excess."

"We had allies on every side; the medical profession was one hundred per cent behind us; every nutritionist was continually urging the use of all types of dairy products as a real base for a wholesome diet. With all this backing and free advertising, we fell into a sense of complacency from which we are still emerging."

In the last few years there have been some serious attempts to make up for past inactivity. The Dairy Foods Service Bureau, Milk Foundations, and the National Dairy Council, in particular, are making serious efforts to promote milk and milk products. The Channel Islands Breeds Milk Producers' Association has demonstrated to the industry that aggressive merchandising and advertising can be effective. The markets in Windsor, London, Ottawa, and Hamilton have achieved some success through joint producer-processor marketing programmes. For the industry as a whole, however, there is still too little effort devoted to marketing. In the face of declining per-capita consumption of milk and milk products the industry must direct significant resources into advertising and sales promotion in order to hold present sales levels.

There are many ways in which the industry could expand and improve its marketing activities. Three fundamental considerations should be mentioned. First, the only sound basis for an effective, constructive marketing programme is the production of top-quality products, and, as we have stressed before, every segment of the milk industry must assume greater responsibility for quality. Second, the industry as a whole must adopt a positive, realistic attitude toward its commodities, recognizing that they will not be consumed habitu-

ally by all persons in large quantities. This is well stated by the European Productivity Agency in these words:

"It has been known for so long that milk is of high nutritional value and almost a complete food in itself that it is somewhat surprising that there still should be so great a scope for consumer education. On the other hand, there have been times when milk was under a shadow, from both the health and hygiene points of view; and prejudices once created are difficult to eradicate—they are passed from generation to generation."

Finally, the milk industry should refrain from attacking competitive products. We believe that the opposition to margarine, for example, provided much free advertising for margarine, and did little or nothing to promote the sale of butter. Another example of this negative attitude, long prevalent, was the suggestion at one of our hearings that soft drinks be banned at Fall Fairs. In our opinion this down-grading of competitive foods will never succeed in increasing milk consumption, but can only result in public suspicion of the milk industry.

(i) School Milk Programme

Many who appeared before the Committee expressed general agreement on the usefulness of a school milk programme. No concrete proposals were made as to how a meaningful programme should come into existence, how it should be financed, or who would provide the leadership to make it work. The witnesses seemed content to assert the need for such a programme, or to echo the policy of the Dairy Farmers of Canada in advocating a national school milk programme.

Ontario has had a "school milk programme", of a sort, since 1952. Under the present arrangement, the Ontario government will pay up to half of the cost of any milk supplied free to children at elementary schools during school hours. The local school board must provide the remainder, but contributions by other organizations are permissible. The present programme has attracted no broad participation and there has been no significant impact except in two markets, Windsor and Ottawa. A study by the Canada Department of Agriculture estimated that in 1959 only 1 per cent of elementary school pupils in Ontario received milk under the present plan. This modest success is in sharp contrast to the school milk programmes in Maine, other United States jurisdictions, and the United Kingdom.

In our view there is nothing fundamentally wrong with the present Ontario arrangement. Indifferent success could be attributed to the lack of serious efforts by fluid-milk distributors, and to the attitudes of school boards. No doubt the fact that nearly all

Ontario school children have access to adequate food supplies is an important consideration. If the milk industry is serious in proposing a significant school milk programme for Ontario, the general framework is available. To become more effective, there must be wider publicity in Ontario communities and backing by distributors and producers. Where school boards are reluctant to assume the necessary costs, local producer and distributor organizations might consider joint action to provide the funds themselves, or secure donations from service clubs or in other ways.

The long-range importance of school milk programmes cannot be easily assessed. There is no doubt that it would do something to establish milk as an habitual part of the daily diet of school children. The most successful school milk programme to which our attention has been drawn is that established in the State of Maine where something like 5 per cent of total fluid-milk sales is through the established programmes. This may seem at first glance to be an attractive increase in total consumption, but in fact it cannot reflect an increase of this magnitude because some of the milk consumed under the programmes would certainly be consumed without them.

(ii) Market Research

Market research related to the milk industry has been practically non-existent in Ontario. Canadians have had to depend on United States surveys and studies for information concerning the attitudes, responses, spending patterns, and milk consumption habits of consumers. Conditions in the United States and Canada are very often assumed to be identical, or nearly so, when, in fact, there may be important differences. No doubt some of the conclusions reached in the United States are quite invalid in Ontario and other parts of Canada. If the milk industry in Ontario expects to promote and market its products successfully it must be willing to devote more of its resources to market research. The Dairy Foods Service Bureau has just undertaken a market research project. The Consumers' Association of Canada has also made some investigations, though on a smaller scale. These are steps in the right direction, but much more needs to be done. One important step could be support for the Dairy Products Marketing Research and Services Committee. Failing this, the producer and processor organizations might consider joint action to establish some similar undertaking.

(iii) Vending Machines

Much more use could be made of milk vending machines. Large apartment blocks, factories, and schools are all places where an automatic vending machine would make milk readily available. Outdoor vending machines could be located at laundromats, shopping-

centre parking lots, gasoline stations or any other place where there is a potential high sales volume. Experience in the United States and the United Kingdom has shown that vending machines can be a successful method of increasing sales.

(f) Fallout Contamination

Dr. Ursula Franklin, representing the Voice of Women, appeared before the Committee at a public hearing in Toronto to express concern over the danger to life resulting from fallout contamination. We were given copies of a statement made by this organization to the Minister of National Health and Welfare, dated 24th June, 1963. One of the recommendations in this statement was that there be "a regular and speedy publication of fallout information which should contain not only experimental data but sufficient interpretation to be meaningful to the concerned citizens."

At the request of the Committee, Dr. W. E. Grummitt, Environmental Research Branch, Biology and Health Physics Division, Atomic Energy of Canada Limited, prepared a statement concerning the essential knowledge presently available on this subject. In order that the citizens of this province might have an opportunity to settle some of their doubts and uncertainties, this statement is included in Part D, Section 6, Exhibit XVI.

The reassuring views expressed in this statement suggest to us that the milk industry might well have taken more energetic action to inform the general public of the relatively slight danger associated with Strontium-90 in fallout.

Section 6

MANAGEMENT OF PRODUCER ORGANIZATIONS

- (a) Ontario Whole Milk Producers' League
- (b) The Ontario Concentrated Milk Producers' Marketing Board and Association
- (c) The Ontario Cheese Producers' Marketing Board
- (d) The Ontario Cream Producers' Marketing Board and Association
- (e) General

(a) Ontario Whole Milk Producers' League

The League differs from the other main producer organizations in that it is not constituted as a marketing board. It has served the large number of fluid-milk producer local associations by negotiation of milk prices through collective bargaining and by serving as a clearing-house for producer licence fees.

In recent years there have been about 120 directors, meeting four or five times each year. This rather cumbersome group considers such matters as election of the Executive Committee, election of officers, minutes of executive meetings held since the last directors' meeting, review of annual meeting resolutions and related disposition by the Executive Committee, approval of the Secretary's salary, reports on negotiations held, discussion of marketing problems, and formula pricing.

The Executive Committee meets about fifteen times a year and deals with such matters as approval of various expenditures, staff salaries other than the Secretary's, action on annual meeting resolutions, formula pricing, negotiations completed or in progress, and problems with distributors.

The routine activities of the League are administered by its Secretary, who stated that he maintained very close contact with the President. The League employs clerical help, a field staff super-

visor, and three fieldmen, and pays the salaries and expenses of three fieldmen working for the Toronto local, one for the Hamilton local, and one for the Ottawa local. The principal activities of the fieldmen involve investigation of complaints, check testing of distributor tests for milk-fat, negotiation of quotas, and quality control assistance.

The financial records of the Board appear to be kept in an orderly manner. However, control over the receipt of licence fees is weak. These fees, which amount to more than \$300,000 annually, are deducted by distributors from amounts payable to producers at rates ranging from 1c to 4c per cwt. as set out in Regulation 424. The League pays a specified proportion to the local associations, retaining about 1c per cwt. to finance League operations.

The Secretary has stated that there are no checks to ensure that all fees deducted by distributors are remitted to the Secretary. If a distributor remits a reasonable amount regularly, the League accepts it without question. If a distributor fails to remit fees in any particular month, and does not reply to correspondence, a Dairy Branch fieldman is asked to investigate.

Pursuant to an oral agreement with The Ontario Concentrated Milk Producers' Marketing Board which has been in effect during the past few years, the League pays to the Board net licence fees collected from producers on fluid milk moved by distributors into the concentrated-milk market. Periodically the Board prepares a billing of all such shipments, which is checked by the League Secretary and approved, prior to payment, by the Executive Committee.

Cheques issued by the League are signed by the President and the Secretary. The control normally associated with dual cheque signing is lacking, however, as the President, for convenience, signs blocks of blank cheques in advance. We were informed that certain expenses, such as those of the Executive Committee, fieldmen, and the Negotiating Committee, are submitted to the Finance Committee, but it would not appear that formal Executive or Board approval is given.

The building at 409 Huron Street, Toronto, which houses the League and a number of other farm organizations, is owned by the League. While day-to-day operations of the building are supervised by the Secretary, decisions regarding important expenditures and setting of rental rates are referred to the Property Committee, who make recommendations to be decided upon by the Executive as a whole. The Secretary informed us that rents had remained unchanged for the past several years although the operation continually lost money. Apparently the Executive feels that as long

as the loss is not serious, it would be regarded as a contribution to organized agriculture, and rents would not be raised.

It would appear that the League has been useful to fluid-milk producers because of its negotiation and field services activities, and the related organizational framework provided for producer affairs. Adoption of our recommendations for a Milk Producers' Pool, as proposed in Part B, Section 2, would eliminate the need for the League as such.

(b) The Ontario Concentrated Milk Producers' Marketing Board and Association

The operations of these bodies have been outlined in Part B, Section 3.

The Ontario Concentrated Milk Producers' Marketing Board appears to have participated actively in the affairs of its producers through price negotiation, quality improvement services, the checking of processors' tests, and the provision of a unified producer voice.

In the conduct of the affairs of the Board, the eight members meet approximately thirty times a year, which seems to be too frequent bearing in mind the extent and nature of the business it has conducted. Agenda for these meetings include such matters as approval of general expenditures and grants and disposition of resolutions passed at annual and semi-annual meetings. We were informed that price negotiations take place only a few times each year and that the eight members of the Board serve as the producer appointees to the negotiating committee. Routine activities are administered by a full-time Secretary-Manager whose staff is comprised of a stenographer-bookkeeper and four fieldmen.

The four fieldmen perform check testing on behalf of producers, and in addition call upon producers whose product has tested poorly and attempt to improve quality. The fieldmen operate with little or no direction, and submit only weekly reports of activity to the Secretary-Manager.

Each processor submits a monthly report to The Milk Industry Board showing the pounds of milk purchased. The Concentrated Board endeavours to exercise some control over its licence fee income by securing a copy of this report. No steps appear to be taken to check this statement with fees deducted by the processors.

From its licence fee income the Board refunds to each local association 20 per cent of the fees derived from the local. This is consistent with the earlier practice of the Association, although it is not detailed in the marketing plan.

Although cheques issued by the Board are required to be signed by the Chairman and the Secretary-Manager, it is the usual practice for the Chairman to sign blocks of blank cheques in advance, nullifying the control of dual cheque signing.

Since the inception of the Board, the activities of the Association have been very limited. With one exception, the members of the Board are also the directors of the Association, and such meetings of the Association as are required are held in conjunction with those of the Board. Separate minutes and records are maintained for the Association.

The Association owns bonds having a par value of about \$150,000, and these are kept in a safety deposit box to which the Secretary-Treasurer, acting alone, has access. Although the bonds are registered as to principal, we recommend that they be subject to dual custody or, if this is inconvenient, that they be lodged for safe-keeping with the Association's bankers, subject to withdrawal on the signatures of two authorized officers of the Association.

Although there has been little change in total bond holdings, interest income shown in the Association's published financial statements varied considerably between the fiscal years 1963 and 1964. This arose because interest on some bonds was not collected as it fell due; all arrears were collected and recorded in the Association's financial statements for its fiscal year ended January 31, 1964. The Committee's assistants counted the Association's bond holdings on May 26, 1964, and checked their count against the records of the organization.

We have recommended that the Board cease to exist with the beginning of operations by the Milk Producers' Pool, but that the Association continue to provide any necessary support for non-Pool shippers.

(c) The Ontario Cheese Producers' Marketing Board

Fairly comprehensive comments concerning the management of The Ontario Cheese Producers' Marketing Board are set out in Part B, Section 4, of this Report. We feel that further comment is unnecessary here.

(d) The Ontario Cream Producers' Marketing Board and Association

In Part B, Section 5, we have described the operation of these organizations.

The nine members of the Board meet approximately once a month to discuss and approve general matters, while its routine activities are managed by its Secretary and one female assistant.

Producer meetings are held annually, at which time such matters as approval of financial statements, election of Board members, appointment of the auditor, and general resolutions are considered. Over the years there has been little turnover in Board membership, and occasionally there has been doubt whether some members were, in fact, cream producers.

During each of the past few years the Board has received licence fees amounting to slightly more than \$100,000. Full reliance is placed upon creamery operators to remit the proper amount of fees, and the Board makes no effort to assure that the amounts are correct.

All cheques issued by the Board are required to be signed by the Secretary and either the Chairman or the Vice-Chairman. The practice followed, however, is that the Chairman or Vice-Chairman signs blocks of blank cheques in advance, and thus the control arising from dual cheque signing is effectively removed. The Secretary stated that he presents at each Board meeting a listing of all disbursements since the last meeting, and provides any explanations required, following which the disbursements are approved.

We have recommended that The Ontario Cream Producers' Marketing Board continue to function without fundamental change in present arrangements. Its principal function should be to serve as a stronger voice for producers in the event that such voice is required.

(e) General

On the basis of this Committee's observations, there would appear to be considerable lack of interest on the part of the majority of producers in the general workings of producer organizations, at both local and provincial levels. At the same time, we noted that communications between producers and their organizations—in both directions—were poor. Mailing lists are apparently out-of-date and incomplete. In such circumstances, members are generally unaware of the reasons for decisions or policies announced by the directors, and conversely, it is scarcely possible that such decisions can reflect the true grass-roots thinking. Disclosure to members in annual reports, including financial statements, is often incomplete or not available sufficiently in advance of meeting dates. Lack of turnover in Board membership also tends to discourage producer participation.

The continuing producer organizations should concentrate on improving their general lines of communication with their members in order to stimulate producer interest in their activities and encourage greater participation at all levels. Purposes and objects

should be reviewed and, if necessary, restated. Mailing lists should be accurate and up-to-date. Adequate and understandable information should be distributed to all members in sufficient time to afford opportunity for discussion and any necessary action. Tenure of office should be subject to reasonable time limits.

Financial controls should be instituted or improved so that there is reasonable assurance that the organization is receiving all the revenue it is entitled to, that expenditures are made only after proper authorization, and that there are proper safeguards over the custody of its assets. The scale of licence fees or other levies should be adjusted periodically to avoid undue accumulation of funds for unspecified purposes.

Section 7

ECONOMIC FORCES AND SOCIAL PROBLEMS

- (a) Economic Forces
- (b) Economic Characteristics of the Dairy Industry
- (c) Difficulties of Adjustment
- (d) Family Farming
- (e) Economic Change and the Processors
- (f) The Social Problems of Adjustment

Throughout this Report we have discussed past and present conditions in the Ontario milk industry. We have made recommendations which we believe are in the future best interests of the industry. Simply expressed, our view is that in the face of changing economic conditions and opportunities, progress must not be halted in order that the status quo be maintained. Economic forces affecting Ontario agriculture are such that changes are inescapable. The only satisfactory long-run programme is one which recognizes the inevitable trend of economic forces in agriculture and other industries. The programme must attempt to modify these forces in ways that will minimize their most serious ill-effects and will increase the benefits which they bring.

Canada has been experiencing a period of enormous economic growth and prosperity. Agriculture has made a remarkable contribution to this growth, and at the same time, growth has brought significant problems to agriculture. In a poor country agricultural production is often low and the price of food high, while in a prosperous country such as Canada the problem is one of low farm prices and surpluses. It is clear that the rewards of growth are not attained without hardship, and that neither the rewards nor the hardship is necessarily shared evenly.

Our recommendations have been directed to making the best use of the resources in the Ontario milk industry. The adoption of these recommendations will not eliminate the problems of economic

growth. We believe that the continuing decline in the number of farms and the increase in migration off the farm will continue under any circumstances. Moreover, we believe that society should not attempt to stem these flows, but face them as inevitable consequences of economic change. Maximum efforts must be directed toward rehabilitation and redevelopment of the human and physical resources so displaced.

(a) Economic Forces

The main economic decisions that must be made in any kind of society are: *what* to produce, *how* to produce it, and *for whom* to produce it.

In a society such as ours, these problems are settled by the "price system". The only other alternative is to use the "command system", whereby a central planning group determines what to produce and how to produce it, allocates the land, labour, and capital goods needed for production, and takes the output for distribution under some form of rationing. In the price system *what* to produce is decided on the basis of what products will result in the greatest profit; *how* to produce is settled on the basis of how to produce most cheaply (and thereby leave the greatest profit); and *for whom* to produce is decided in that sales are made to those who will pay the highest price.

The price system is largely impersonal—profits, prices, and costs rather than sentiment and emotion help us to decide what, how, and for whom to produce. Prices are determined by demand and supply.

The term "demand" includes many items, including government purchases, guarantees, and subsidies; each helps to determine how much of a product people will buy at different prices. Except under the most unusual circumstances, people will buy more if the price is low and less if the price is high. The amount of any product that people are willing to buy at any one price depends to a large extent upon the prices of other similar and competing products. Examples of competing products are butter and margarine or whole milk and skim-milk. As incomes rise, the demand for various products changes; for some products the demand increases more, in percentage terms, than income had increased; for other products demand increases more slowly than income; and for still others demand actually falls with an increase in income.

The following Table shows the changes in the per-capita consumption of various food products in Canada between 1951-53 and 1962. These figures reflect both changes in relative prices and the changes in preferences which accompany higher incomes.

Canadian Per-Capita Consumption of Selected Foods 1962, and Changes in Consumption 1951-53 to 1962*

Food	Consumption per- capita, 1962 (lbs.)	Change in per-capita consumption 1951-53 to 1962 (increase +, decrease -) (in %)
Frozen fruit and vegetables	5.4	+ 260.0
Fruit juice	33.3	+ 63.2
Poultry	31.0	+ 56.6
Coffee	9.7	+ 42.6
Cheese	8.1	+ 37.3
Margarine	10.1	+ 34.7
Beef	69.3	+ 23.1
Canned fruit and vegetables	41.4	+ 9.5
Potatoes	161.5	+ 8.6
Eggs	33.8	+ 4.0
Refined sugar	100.6	+ 3.8
Fresh fruit and vegetables	186.5	- 2.0
Breakfast foods	6.5	- 3.0
Pork	49.8	- 8.5
Flour	132.6	- 11.2
Rice	3.4	- 15.0
Whole milk	326.4	- 15.1
Butter	17.9	- 16.4
Tea	2.3	- 25.8

* Source: Adapted from Bank of Montreal Business Review, October 30, 1964

“Supply” refers to how much of a product people are willing to produce and sell at different prices. Except in unusual circumstances people are willing to sell more if prices are high and less if prices are low. The amount of a product that people are willing to produce and sell at any one price depends upon the profitability of producing that product compared with the profitability of producing other products or of taking a completely different job.

Putting together what has been said about demand and supply, it is apparent that if a price is so high that the amount that people are willing to produce at that price is greater than the amount that other people are willing to buy, then there is a surplus and the price must fall.

Every producer is in some way in competition with every other producer. If they produce the same product, they are directly in competition; even if they produce different products they are still competing for the consumer’s dollars.

If a new method is introduced which makes it possible to lower the cost of producing a product, the price of that product will fall as more people adopt the new method unless the demand for that product increases sufficiently. It is in the best interest of any one producer to adopt a new technique that reduces costs of production. Those who cannot or do not adopt it suffer lower incomes; they are using yesterday's higher-cost methods to produce for today's lower prices.

Milk producers in some areas are not able to adopt new methods of production or adopt them fully, because of such factors as short growing season, small irregular fields, shallow stony soil, lack of credit, the high cost of tractors, fuel, and fertilizer, and high transportation cost to markets. For similar reasons some producers in more favoured areas may be unable either to adopt new techniques or to obtain the maximum savings from them. The result is that such producers, often through no fault of their own, are at a disadvantage in competition with those who can adopt the new cost-reducing methods of production. For examples of such disadvantage one has only to look at parts of northern Ontario, eastern Ontario, and the Maritimes.

Agricultural research, farm extension services, and marketing organizations for farm products, if effective, affect prices and profits. The purpose of research and extension activities is to ascertain and make known new and cheaper methods of producing and marketing.

If research and extension work in Ontario are not as effective as in other provinces, then producers in Ontario will be at a disadvantage in competition with producers in other provinces. The same principle holds among countries and even among counties within a province. If the agricultural representative of County A is not as capable as the agricultural representative in County B, then the producers in County A are at some competitive disadvantage.

Marketing organizations and government programmes may have as much beneficial effect on production and marketing as do research and extension. If the organizations and programmes in Ontario are such that they promote efficiency of production and marketing more ably than do those in other provinces, then Ontario producers will be favoured in the competitive struggle. The converse is also true.

(b) Economic Characteristics of the Dairy Industry

Per-capita consumption of dairy products in Canada has been declining while total consumption has been increasing slowly as a result of increase in population. The nature of production is such

that only a little technical or economic change is required to increase output as fast as demand is growing, or faster. If, as has been the case, the rate of growth in output exceeds the rate of growth in demand, there will be a downward trend in farm prices. This may be offset to some extent by government action, but eventually it must force extensive adjustments upon the industry. The result of increased output is to depress prices and incomes and eventually to force some of the existing resources out of production, causing dislocation, adjustment, and hardship among farm people.

Dairy producers range from those with large productive farms concentrating on milk production and close to high-price markets, all the way to those with poor farms, far from markets, on which dairying is a minor enterprise. Some producers have high incomes; some have low incomes. The capacity of farmers as managers also varies greatly, but the best potential managers are not always making the most money because capital and advice are not available, or markets are remote.

Milk production per herd is increasing faster than the demand for milk, with the result that the number of milk producers must decline, and has been declining.

The major problem of the dairy industry, and indeed the problem of agriculture itself, is to ensure that adjustments in the number of farm people keep pace with changing economic circumstances.

The price system produces the need for adjustment and is, as we said above, impersonal. But that does not mean that governments do not have a responsibility for persons. It is not enough to say of low-income producers, "Let them do something else". Federal and provincial governments have a responsibility which they can best meet through (i) maintaining conditions of high employment and economic stability in the economy as a whole and (ii) assisting the transition of displaced producers to new and better-rewarded occupations.

(c) **Difficulties of Adjustment**

Adjustment is complicated by the tendency of dairying resources to become fixed. This tendency is increased by technological change because of the resulting heavier capital investment and the increasing degree of specialization. Even with falling incomes, resources remain committed to dairying, and production frequently will continue, or even increase, in spite of losses. One reason for this is that the specialized buildings and equipment frequently have little or no alternative use, and therefore have a low sale value. It seems best to keep on producing milk.

There are other important reasons why farmers and their families continue to be milk producers. One of them is that many farmers, particularly those on marginal farms, are geographically distant from the larger centres of non-farm employment. As a result the costs of either commuting or moving in order to obtain non-farm employment are quite high. Sometimes this same factor tends to discourage expansion of urban industry and the employment opportunities that would follow.

Adjustment is impeded by the difficulty of transferring farm skills to non-farm employment where important specialization and skills of another kind are required. Thus, those who have been farming for some time find they are no better off than new entrants to the labour market. In fact they may be worse off because of the general aversion to hiring older workers, and because the younger men are likely to have a better formal education in terms both of years and quality.

The low level of education of many farm youths is particularly unfortunate during periods of low employment. Then unemployment is heavily concentrated among the young, the unskilled, and the poorly-educated, as many farm youths are. Then too the possible earnings outside agriculture are low, and such youths remain on the farm because this appears to be their best or safest income opportunity. Many rural boys leave school at an early age to help on the farm or to turn a hand toward increasing the family income. In a few short years they are part of the basic problem of agriculture—part of the surplus of low-income, unskilled workers, backed up on the land.

(d) Family Farming

The fixity of human resources in dairying, and the problems of adjustment, relate to the considerable concern expressed to the Committee about the future of the "family farm". Producers supporting the preservation of the family farm as a way of life pointed out:

"It is a happy way to live".

"There is a lot more in farming than dollars and cents".

"We are dealing with people, besides industry, and besides things, and the rural population has decreased a lot and it will further decrease. It is increasingly difficult to maintain some of the rural things that are of tremendous value. Any pure-bred breeder of stock knows you have to get fresh blood lines once in a while. Where is the city going to get fresh blood lines if you destroy the rural people."

We understand and accept the values intended in these observations.

The family farm, an economic and social unit, is the form of agricultural organization typical of the milk industry in Ontario. We concur with the Agricultural Marketing Inquiry Committee that a family farm is one "on which most of the labour and management are provided by the farmer and his family, and which returns to the family a level of living considered acceptable by them and the community at large". As far as we can foresee, milk production in Ontario will predominantly take place on farms fitting this definition. If this be so, then the advantages and benefits of farming as a way of life will still be obtainable from dairy farming as a family business.

We do not feel that economic progress should or could reasonably be stemmed by perpetuating marginal or sub-marginal operations in the name of family farming. This would weaken the true family farm and curtail economic growth. Also, the expenditures involved, which would be essentially related to the accompanying social problems, could be much more constructively used for more enduring solutions.

(e) Economic Change and the Processors

Economic and technical change has affected not only producers of milk but also processors, manufacturers, and distributors. There has been a continuing decline in the number of milk factories and a substantial consolidation of enterprises, making for fewer and larger plants, economies of scale, and greater flexibility within plants.

In a brief submitted by the Ontario Milk Distributors' Association, the situation of the dairy processing industry seems succinctly and validly put:

"Dairy processing is changing due to changes in both demand and supply. On the demand side, constantly changing consumer tastes have shifted the emphasis to lower fat dairy products, and competition from alternative products has induced changes in packaging, handling and distribution of dairy products. In many cases the dairy industry led the way in introducing changes. Increasing income levels in the overall economy have not favoured the dairy industry. . . .

"On the supply side, technological and technical changes have been strongly operative. Bulk tank pick-up, in-place cleaning, and automatic material handling are superseding other methods, but a whole host of changes such as bottle size and paper packs

internally, and cans, roads and supermarkets externally, are affecting processing and distributing methods. The industry must remain flexible if it is to adjust to these changes. The adaptability of individuals, plants, distribution and institutional arrangements is an important condition for the maintenance of economic health in the dairy processing industry."

Changing economic conditions and opportunities have unquestionably created difficult adjustments for milk processors. Social and economic problems have resulted from the closing of creameries, local dairies and cheese factories, and the replacement of workers with automatic equipment. These adjustments have been taking place over a long period of years. Undoubtedly some processors have suffered severe financial loss, but, in general, it appears that they have been able to cope with the change forced upon them by selling assets, establishing new businesses, or taking employment in the community.

(f) The Social Problems of Adjustment

Adaptation and adjustment to new circumstances inevitably follow economic change. As we have indicated, adjustments in agriculture are complicated by its competitive structure, the rapidity of change, and the high degree of fixity of its resources. The latter is by far the most important aspect of the problems of adjustment, and is the root of the social difficulties which must be confronted.

The Committee recognizes that rapid migration from rural areas can result in great social and economic costs to rural communities. These include the effect upon local institutions and businesses, the loss in property values, and the rising costs per pupil of operating reasonably good school systems in areas that are solely dependent upon a sparsely settled farm population. Churches lose membership and eventually close. Over the years the steady decrease in population, especially of young people, tends to rob the rural community of its vitality.

On the other hand, the uneconomic farm tends to perpetuate poverty and poor education from generation to generation, and therefore has a cumulative effect, socially and economically. The Committee accepts this statement from the Report of the Eastern Canada Farm Survey, 1963, to the Canada Department of Agriculture:

"This study reveals beyond reasonable doubt that the economic, social and human costs of maintaining a rural population earning no more than a sub-standard income from the inadequate resources at its disposal are very high. It is wasteful of human talent. It is frequently a breeding ground for persons who cannot be accommodated in the country or employed in the city, and

are destined to exist throughout life in a no-man's land of under-training and under-employment. Such people are denied all hope of achieving either farm prosperity on the one hand, or urban prosperity on the other."

This Committee offers no universal remedy for the problems of farmers caught in the whirlpool of change and adjustment. We believe, however, that there is public responsibility and an urgent need for positive policies and dynamic action.

Section 8

FORMULA PRICING

- (a) History
- (b) Role of the Formula
- (c) Critical Evaluation of Formula Pricing in Ontario

Ten years have passed since a system of formula pricing for fluid milk was introduced in Ontario. Essentially the price formula for fluid milk has tended to serve as a substitute for price-setting through collective bargaining, rather than merely as an indicator of general price levels, as was originally intended. It has provided for automatic adjustments in price without frequent and protracted negotiations between producers and distributors, and all the attendant frictions and suspicions. In the last few years, however, the formula has been a source of considerable criticism and controversy. At the present time it may be reasonably stated that the formula does not enjoy the widespread respect and support necessary to its effective operation, nor is there much prospect that confidence in it is likely to be restored in future. For these reasons and others which are stated below, we recommend that the formula system of pricing fluid milk be abandoned in Ontario.

(a) History

In 1951, at the request of the Ontario Whole Milk Producers' League, the Minister of Agriculture appointed a special committee, headed by Mr. E. M. Biggs, then Dairy Commissioner, to study the possibility and desirability of introducing a formula for the pricing of fluid milk to the producer. After lengthy study of formula pricing as used in a number of United States markets, the committee in July 1954 presented a formula it considered most likely to be satisfactory in Ontario. It consisted of six index numbers, variously weighted, which it was felt recognized demand and supply along with the level of farm costs. To avoid frequent price adjustments, producer prices were to change only when the formula indicated a movement of at least 19 cents per hundred pounds either up or

down. The principle of formula pricing appears to have been readily accepted by the industry and was quickly written into a number of market agreements.

The revision of the Milk Industry Act in 1957 provided for the appointment of "The Formula Committee for Fluid Milk", with the principal object "to determine a formula by which a fair price to producers for fluid milk may be calculated". A related Regulation approved the price formula and provided for its inclusion in all fluid-milk market agreements filed with the Milk Industry Board.

On recommendation of the Formula Committee the formula has been amended twice by Regulation, once in October 1961 and again in May 1964. The original composition of the formula and the revisions in the indexes used and relative weighting are shown by the following tabulation:

Indicators	Relative Weight		
	1954 Original Formula	October 1961 Revision	May 1964 Revision
Wholesale prices (Canada)	20	20	20
Weekly earnings (Ontario)	20	10	—
Commodities and services used by farmers in eastern Canada	30	30	30
Price of butterfat (Ontario)	10	10	10
Price of milk for condensed products (Ontario)	10	10	10
Price of cheese (Ontario)	10	10	—
Employment (Ontario)	—	10	—
Fluid-milk sales as percentage of total milk sales (Ontario)	—	—	20
Inverse of milk production per cow (Ontario)	—	—	10
	<u>100</u>	<u>100</u>	<u>100</u>

(The 1961 revision also changed the base period of the indexes used
from 1947-52 to 1958-59.)

The operation of the formula has resulted in four increases of 19 cents each in the basic price—November 1956, October 1957, October 1959, and September 1, 1963—to its present level of \$5.29 per 100 pounds.

On October 31, 1962, the use of the formula was suspended in view of the uproar caused in the industry by the indicated 19-cent price increase due on November 1, 1962. The suspension was

removed in February 1963 when it was announced that there had been an error in the original calculation made in October 1962.

(b) **Role of the Formula**

There has been widespread misunderstanding of the role of the formula in determining prices in Ontario fluid-milk markets. Among both distributors and producers there appears to have been a general but erroneous belief that any change in the formula must inevitably be reflected in actual purchase prices. The formula was not intended as a determinate or final mechanism for establishing prices; rather it was to establish a "fair price" to serve as a guideline or bench-mark for actual prices. Producers and distributors are free to negotiate market differentials above or below the formula price, and in fact, almost no market prices are exactly at the formula level. This freedom to bargain collectively in order to determine prices is set out in Section 23 of the Milk Act. The function of the formula in price-setting was clearly stated by Mr. C. M. Meek, then Director of the Fluid Milk Division of the Dairy Branch, in a letter to the League and to the Ontario Milk Distributors' Association on October 12, 1962:

"The Industry has accepted the Formula as being an indicator of economic conditions in respect to the prices to be paid for milk supplied to distributors and has used it only as a basis in arriving at a market price through negotiations. . . . In the final analysis, the Industry has the responsibility of arriving at prices to be paid for fluid milk supplied by producers to any market."

While recognizing the freedom or latitude to negotiate fluid-milk prices, it must be noted that, almost without exception, actual market prices have indeed followed changes in the formula price. This historical parallel seems to be the cause of the misconception that market prices for raw milk should necessarily be tied to the formula price. The ambivalence of the formula in price determination was expressed by Professor C. B. Haver at the Toronto hearing on November 25:

"I'm aware that there is room for negotiation about the formula prices, and, in fact, I would interpret the formula price to be merely a guide-line. It has appeared, at least, in many markets, the major markets, to be, with minor differentials, pretty well determining the price."

The majority of producers appear to have little understanding of the function or the limitations of the formula. Because it has given them regular price increases over the years, they have come to regard the formula as something indispensable and inviolate. This

attitude of producers toward the formula was noted by Mr. J. L. Baker, Chairman of the Formula Committee:

"It should be observed that the rank-and-file producer does not understand how the formula is established, how it is calculated, and most particularly that it is a mathematical formula designed by man in the hope that the calculations will result in a fair price for milk for fluid purposes. Producers generally believe that there is some magic in the word "formula" and that it is infallible and should not be changed."

(c) Critical Evaluation of Formula Pricing in Ontario

The formula's contribution to fluid-milk pricing in Ontario has been to reduce the extent of negotiations between producers and distributors and to level out the periodic fluctuations that would otherwise be associated with free market pricing. On the other hand, there have been serious disadvantages and weaknesses in formula pricing as it has operated in Ontario.

There has been a basic misunderstanding of the formula and its structure by most of the parties concerned. They have not recognized that it is impossible to arrive at a fair price through indexes, weightings, base periods, and other imperfect measurements. As stated in the brief of the Ontario Milk Distributors' Association to this Committee: "This formula, like every other milk formula, only makes sense if it is so composed that it predicts conditions reasonably well. If it does not then it is nonsense and harmful." In our opinion it is inconceivable that any formula devised by humans could predict conditions for any lengthy period in the future. It should now be evident that the formula has not reflected supply-and-demand conditions in the milk industry nor is it likely that it could ever be revised to do so in a meaningful way.

The fluid-milk price formula has only indicated changes upward. This should have been expected because of the heavy weighting given to a number of items not likely to decrease in the period since 1957: the wholesale price index for Canada, average weekly earnings for Ontario, price index of commodities and services used by farmers, index number of employment for Ontario.

The price index of commodities and services used by farmers, for instance, does not indicate the costs of fluid-milk production any more than it indicates costs of tobacco or hog production. The general wholesale price index for Canada does not reflect in any meaningful way either the demand or the supply forces facing fluid milk in Ontario. At best it is simply an indication of the weighted average price levels of a series of commodities that bear little or no direct connection to the supply or demand for fluid milk.

Other items in the formula have been the prices of milk-fat, milk for condensed products, and cheese, all of which have received federal price support of one kind or another for most of the last seven years.

The Formula Committee has been given only advisory powers and has not been sufficiently insulated from industry pressure groups. There has not been regular review of the formula, or prompt changes in the formula when these have appeared desirable. The formula has apparently been revised only in times of crisis, when it seemed advisable to avoid further increases in milk prices. At such times the chief concern of the Formula Committee was apparently to find a combination of factors that would delay for the longest possible time showing any increase in price. Both producers and distributors have accordingly tended to look on changes as arbitrary manipulations to correct previous deficiencies or to keep prices from rising in future.

Because the fluid-milk formula has indicated only price increases, other producers have come to associate formula pricing with high prices. They have asked, therefore, to have formula pricing extended to their milk in order to solve their problems of low prices.

Unless a formula is accepted by all concerned it cannot operate effectively. In Ontario support of and trust in the price formula has been weakened by a succession of events: the changes in weighting and bases in 1961 and 1964 created uneasiness; the temporary suspension in 1962 disturbed the industry.

We have come to conclude that the fluid-milk price formula no longer serves a useful purpose in Ontario. With the advent of the proposed Milk Producers' Pool, it seems likely that distributors and producers will be able to rely upon negotiation of prices, without the assistance of a price formula. No formula can be a reasonable and effective substitute for pricing based on decisions made directly by the parties concerned, and reflecting sound assessments of the economic conditions in the industry.

Section 9

RESEARCH

- (a) Research Resources
- (b) The Need for Research

Throughout this Report the Committee has recorded dozens of examples of the need for greater knowledge of the milk industry. This new understanding will be secured only as a result of careful inquiry and critical investigation.

Research, and the benefits derived from it, are outstanding characteristics of this century. In Canada, scientific studies of great variety, including research in agriculture and the dairy industry, have been supported by federal and provincial governments, universities, and industrial organizations.

In discussing this subject it is necessary to distinguish between *basic* research—fundamental studies yielding knowledge for later, not immediate use—and *applied* research, producing information of immediate practical value. The second is very often impossible without the first.

Most research requires elaborate and costly facilities, and the results must be used extensively if the expenditure is to be justified. Large businesses and governments have a very great advantage over smaller entities. In Canada few units in the milk industry are big enough to undertake serious research activity. At the same time, dairying in Canada, considered as a whole, is of sufficient importance to justify substantial research. As a result, government and associations of milk industry enterprises must act collectively if adequate research is to be undertaken.

- (a) Research Resources

There is no satisfactory way in which to measure either the extent or the adequacy of present research resources available to agriculture or the milk industry. However, we have made some explorations and have attempted a limited assessment.

(i) The federal government supports research related to dairy-ing in a variety of ways not always identifiable directly with the industry, for example, in the Division of Applied Biology, National Research Council.

The Dairy Technology Research Institute was established by the Canada Department of Agriculture in 1953. It has been concerned both with short-term practical problems and more extended search for fundamental knowledge likely to be useful only in the future. Dr. C. K. Johns, recently retired as Director, reports that in his opinion dairy technology research in Canada has always been on a very modest scale. His study of the allocation of resources in the Netherlands, Australia, England, and New Zealand suggests much greater financial support and staff elsewhere. He wrote of his Institute in 1959:

"The time of the present staff is taken up almost entirely with work on practical problems. They have no time for studies of a more fundamental nature. This we believe is not a healthy situation."

"We firmly believe that the well-being of the industry can best be promoted through increased emphasis on research, and that funds spent on research will return more lasting dividends than will those devoted to price support schemes."

Dr. Johns's views had not changed when he appeared before this Committee in Ottawa on November 8, 1963. He stated:

"Yes, I think that, as everyone else in the field of research, I feel that more support could have been given to the work. So far as the Federal Government is concerned . . . the need is less pressing than it was. At the same time, there are always problems that can be worked on to advantage here."

(ii) The provincial governments appear to have mixed attitudes toward dairy research. Those with whom we talked credited Ontario with having more people so engaged, most of them in the universities, than any other province; there was praise for work being done elsewhere, particularly in Western Canada.

The Report of the Ontario Agricultural Commission, 1881, contains little evidence of research activity. It reports that at the Ontario Agricultural College "some matters that more or less urgently need attention" include "a thoroughly well-furnished laboratory. The room used for that purpose at present . . . will accommodate only two or three students at a time; is about 8 by 12 feet in size; was never intended as a laboratory. . . ."

Dr. D. M. Irvine, Head, Dairy Science Department, Ontario Agricultural College, presented a written statement to the Com-

mittee on September 12, 1963. He wrote that, "It is the obligation of the Department . . . to promote Dairying in all its ramifications to ensure a prosperous Dairy Industry. . . ." He declared that his Department attempted to perform these functions in four ways, but his summary included no reference to research.

Later in this same statement there was reference to student research projects and a section concerning staff research in the Dairy Science Department. This subject was discussed with Dr. Irvine, and the transcript reads:

"The Chairman: I am very much impressed by the lengthy statement of the interests that you have presented to us. Do your people have as much time for applied research as you feel is appropriate?

Dr. Irvine: No, we do not, sir.

The Chairman: Do you do any basic research?

Dr. Irvine: A small amount.

The Chairman: Does anyone in Canada do an important amount of basic research?

Dr. Irvine: The only place it would be done would be at Ottawa. A little bit is being done at Alberta. I think this would be the extent.

The Chairman: Alberta you say has three people?

Dr. Irvine: Yes. They have a lot of money which is provided by the Alberta Dairy Association and they have quite a large number of graduate students.

The Chairman: Why does Alberta have a large number of graduate students?

Dr. Irvine: They have the money to attract them, sir.

The Chairman: There are one or two items as to grants made from industrial organizations. Have these been available through many years?

Dr. Irvine: They have been limited, sir. Some of them have been available. Some of our research is related directly to these grants because the grants are available. I would say they are limited. We can always use more grants.

The Chairman: When you get these grants are they stipulated for use in a specific research undertaking?

Dr. Irvine: Most of them are."

It seems clear that much or most of the staff time at Ontario Agricultural College is devoted to extension activities, short courses for dairy plant operators and bulk tank drivers, advice to farmers, the running of test laboratories, and education of consumers. The staff appears to have too little time to pursue an active research programme.

The same general problem appears to exist at the Kemptville Agricultural School. We were told by Mr. O. R. Irvine, Head of the Dairy Division, that research activities, none of a basic nature, have expanded in recent years, but "in so far as possible, this work is done between April 15th and September 15th so as not to interfere with teaching."

Mr. Irvine concluded his written presentation with this paragraph:

"With regard to future research, it is expected that while needs in this area will grow, the Division will likely have to confine itself to comparatively simple projects, mainly concerned with cheese manufacture. It is felt that recent efforts along this line have been well worth while however, and should be expanded, if possible. As the activities of the large central research institutions become more specialized and complex, there will be an increasing need for smaller units doing "applied" and "interpretive" types of projects. These, along with some of the survey types of study conducted by this Division in the past, can very well assure that its contributions in the future will be of real value."

(iii) Research within the dairy industry appears to have developed slowly because the great majority of operating units have been quite small and because most of the large manufacturing enterprises have been controlled outside Canada and have depended on research done by parent companies.

There seems to be some new awareness of the value of dairy research and agreement that some of it can best be done in Canada. This is the result of recognition of problems uniquely Canadian, the development of a highly industrialized society, and the emergence of discriminating markets.

(b) The Need for Research

Eloquent pleas for greater research resources and lengthy lists of research proposals can be found in every segment of Canadian economic life. The dairy industry is not alone.

We have not prepared a record of possible research projects, but this could be done quite easily. The priorities assigned to studies

would be a matter of opinion and would change continuously. This Report has many research suggestions scattered through it.

We wish to state most clearly that too little is known about many essential elements of the dairy industry. This ignorance is inevitable so long as there is inadequate collection, co-ordination, and analysis of basic statistics. Moreover, extensive research will be difficult and sometimes impossible until this primary need is met. Mr. Justice Wells voiced the same concern in 1947.

Research in dairying must be supported by all sections of the industry and by government.

Producer associations should greatly extend their commitments. Mr. George R. McLaughlin said to the Committee in Toronto on December 5, 1963: "Our farmers haven't got their thinking matured to the point where they do those kind of things. I think this is the reason why we do not have enough answers to those things."

In some contrast, Mr. C. E. S. Walls, Manager, British Columbia Federation of Agriculture, reported at the 31st Annual Convention last year:

"We have continued to call a number of meetings of representatives of all our member dairy organizations. After much discussion the delegates came to the conclusion that there is not enough data and precise information available on which the industry, the Milk Board or the Government can base worthwhile policy decisions."

"A sub-committee was therefore appointed to draft the terms of reference for a proposed economic survey of the future of the B.C. dairy industry. These terms were then embodied in a brief submitted on November 13, 1964 to the Hon. Frank Richter, Minister of Agriculture. With the producers offering to contribute to the survey costs, the Minister appeared receptive to our request and agreed to give us his decision at an early date."

The magnitude of industrial research in Canada cannot be determined with precision. In 1958 the Dominion Bureau of Statistics conducted a survey and reported research expenditures by industries. About 1.2 per cent of the total of \$149 millions was attributed to foods and beverages. Another classification by field of research assigned less than $\frac{1}{3}$ of 1 per cent (\$421,000) to agriculture. Of the 4,448 research-development scientists employed, only twenty-six, or about $\frac{1}{2}$ of 1 per cent, were listed as agricultural scientists. Six of these held a Doctorate. A newer study might reveal a somewhat different picture.

In the Netherlands, Australia, and New Zealand the dairy industry makes substantial contributions to research in recognition of the national importance of this industry. In the United States research support is substantial at the state level.

Dr. John Nesbitt, University of Manitoba, stated his views to the National Dairy Council of Canada on October 8, 1963: "It is my contention that more and more money must be spent on dairy research and that more and more of this money is going to have to come from the dairy industry itself. Our industries are facing up to the challenge of research. The dairy industry must accept this challenge."

The Ontario government's support of research in dairying has not been unlimited. We have already reviewed the situation at Guelph and Kemptville. Our conversations suggest undue difficulty in financing important studies even when little money is required. There is cause for apprehension that the declining numbers of students taking the dairy science option at Ontario Agricultural College (seven in 1963-4) may result in less support from the Ontario government, either for research or for teaching.

Co-ordination of the research which is undertaken in dairying is important. Whether resources are limited or bountiful, duplication of effort and resulting waste cannot be accepted.

PART D**APPENDICES****Section 1****ACKNOWLEDGMENTS**

The members of the Ontario Milk Industry Inquiry Committee received invaluable assistance from many persons and organizations. Most of their names are recorded in the next three sections of this Report together with our thanks.

We are most pleased to acknowledge the great courtesy shown to us by senior representatives of the milk industry and officers of government outside of Ontario, that is, in Michigan, Minnesota, Ohio, British Columbia, Manitoba, Quebec, and the United Kingdom. They were most generous in sharing their experiences with us.

Dr. G. I. Trant, University of Guelph, assisted the Committee in our study of certain economic problems. Much of the early research and acquisition of materials was undertaken by Mr. Duncan Allen, on loan from the Ontario Department of Economics and Development, and Miss Grace Lew, Research Assistant, The Canadian Institute of Chartered Accountants. Miss Adeline Boyko and Mrs. Barbara Urquhart also assisted. We are grateful to each of them.

Mrs. Edna McCulloch was Secretary to the Committee throughout our study. Her patience, great experience, and unusual ability were essential to our progress.

Mr. Thomas G. Hicks, a senior member of the Dairy Branch staff, Ontario Department of Agriculture, acted as General Secretary to the Committee. He brought wide knowledge of the milk industry, endless enthusiasm, and sound judgment to our task. We record our deep indebtedness and esteem.

Section 2

THE COMMITTEE'S PUBLIC HEARINGS

The Committee arranged thirty-nine public hearings in locations as remote from each other as Emo from Finch. Extensive public notice was given and all concerned with the milk industry were invited to make known their views and recommendations.

The rules of procedure at the hearings were quite simple. Written submissions were heard in the order in which they were received by the Committee. After each presentation anyone was free to speak to the matters thus brought to the meeting. No notice of intention to appear was required and everyone who wished to speak at every meeting was free to do so without restriction.

We followed the same course as the Ontario Agricultural Commission of 1881 which reported that "The examinations of witnesses have been conducted in as informal and conversational a manner as was consistent with good order, and the dispatch of business." The Committee did not engage legal counsel to participate in public hearings. We believed that great formality would have inhibited the free discussion which seemed vital to enable us to secure extensive understanding of milk industry problems. All but one or two of those who appeared before us evidently shared our view.

The Committee heard 149 written presentations in 19 centres. The transcript of the evidence submitted, not including the briefs, runs to 5,350 pages, or approximately 1,250,000 words. The places and dates of public hearings follow:

Belleville	August 27
Brockville	August 26
Emo	July 17
Finch	August 21
Fort William	July 16
Guelph	September 10, 12, 13
Hanover	September 4
Kenora	July 15
Kirkland Lake	July 22

Lindsay	August 28
London	September 3, 6
	November 15
Orillia	September 5
Ottawa	August 20, 23
	November 8
Renfrew	August 19
Ridgetown	September 9
Sudbury	July 19
Timmins	November 1
Toronto	July 29, 30
	August 1, 2, 6, 7, 8
	November 21, 22, 25
	December 5, 6
	January 30, 31, 1964
Vineland	September 11, 18

(All hearings were held in 1963 except for the two noted.)

Section 3

BRIEFS SUBMITTED TO THE COMMITTEE

The Committee received 149 written submissions from individuals and organizations interested in the milk industry. Each of them was presented at a public hearing for criticism and assessment by those present. Written and oral comments were received after the public hearings concluded and every attention was given to these communications.

Almost all of the briefs presented to us contained convincing evidence of lengthy debate, serious thought, and honest concern with one or more aspects of the industry's difficulties. Many of them were clear, straightforward, unequivocal statements of great merit and usefulness.

We must, however, note that many written presentations were deficient in one or more ways. Some of them failed to present vital but unfavourable facts; others included erroneous data; fact and opinion were sometimes confused. Some presentations were made in the name of organizations whose members (or even directors in at least one case) had not had adequate opportunity to assess or refute the views expressed.

The Committee has recommended that the proposed Ontario Milk Commission provide frequent opportunity for public discussion of milk industry problems. We further recommend that all who present their views do so in an orderly manner after most careful preparation and using such specialist assistance as may be necessary to achieve representations that are clear and forthright.

The places at which public hearings were held and the names of the people and organizations making written submissions are listed hereunder:

BELLEVILLE

Belleville Milk Producers' Association (Charles Treverton)

Hastings and Prince Edward Counties, Ontario Farmers' Union
(Mrs. Jean Williams)

Kingston Milk Producers' Association (Wartman Wallace)

The Ontario Cheese Producers' Marketing Board (Hector Arnold)

Trenton, Belleville and District Distributors' Association (S. O. Graham)

Trenton Milk Producers' Directors (Douglas Harry)

BROCKVILLE

Brockville Concentrated Milk Producers (George Montgomery)

The Brockville Whole Milk Producers' Association (G. Byron Bennett)

Brockville Zone, Ontario Milk Distributors' Association (Joseph C. Dye)

Gananoque Whole Milk Producers' Association (Bruce Galway)

Grenville County Federation of Agriculture (John A. Carley)

Leeds County Cheese Producers' Association (W. O. Coon)

Leeds Dairy Farmers (P. C. Toxopeus)

EMO

Producers' Co-Operative Creamery Co. Ltd. (George E. Lockhart)

Rainy River-Kenora Milk Producers' Association and Fort Frances Milk Producers' Association (M. R. Zimmerman)

FINCH

Harold Allen (read by Secretary)

Cornwall Fluid Milk Producers (Thomas Aitken)

The Eastern Ontario Concentrated Locals of Alexandria, Chesterville, Winchester, Williamsburg and Kemptville (Preston Ralph)

Glengarry Federation of Agriculture (Fraser Campbell)

Ben Hoogendam

Stormont Federation of Agriculture (Alfred Beaudette)

FORT WILLIAM

Consumers' Association of Canada, Ontario Provincial Branch (Mrs. W. Brechin)

John Graveson

William Klomp

Thunder Bay Milk Producers' Association (Gerald Seed)

GUELPH

Brantford Milk Producers' Association (Robert Guest)
 Brant County Farm Management Association (Warne Emmott)
 Dufferin Cheese Milk Producers (Harold Lennox)
 Flowerlea Dairy Co-Operative (J. A. Clarkson)
 Guernsey Cattle Breeders' Association of Ontario (Earl N. Shultz)
 Harriston Local, The Ontario Concentrated Milk Producers' Association (William Tilden)
 Norfolk Whole Milk Producers' Association (Ralph Golding)
 Ontario Agricultural College, Dairy Science Branch (D. M. Irvine)
 Oxford County Federation of Agriculture, Dairy Committee (Irwin Hartley)
 Paris Milk Producers' Association (Gordon McRuer)
 Simcoe Cheese Milk Producers (Kenneth Kitchen)
 Specialty Cheesemakers of Ontario (Fred Day)
 St. Marys Ontario Concentrated Milk Producers' Association (William T. Langdon)
 Twin City Milk Producers' Association (Abner S. Martin)
 The Waterloo County Federation of Agriculture (Harold Shantz)
 Thomas F. Williams

HANOVER

The Concentrated Milk Producer Locals of Tara, Teeswater, Clifford and Durham (Thomas Firth)
 The Fluid Milk Shippers of Grey, Bruce and Huron Counties (Robert F. Hutchinson)
 Kimberley District Co-Operative Creamery, Directors and Patrons (Joseph Rudney)
 Walkerton Dairies Limited (Ralph E. Walker)

KENORA

Dryden Milk Producers' Association (C. E. Skene)
 Kenora District Milk Distributors (Lucien Van Walleghem)

KIRKLAND LAKE

Ansonville-Iroquois Falls Milk Producers' Association (Henri Perras)

Cochrane Milk Producers' Association (J. A. Allard)
 Hillcrest Dairy, Iroquois Falls (Walter Burton)
 Kapuskasing Milk Producers (A. Dennison)
 Temiskaming Milk Distributors' Association (Dean Archer)
 Temiskaming Milk Producers' Association (W. R. Peters)

LINDSAY

Peterborough Concentrated Milk Producers' Association (Clifford Johnston)
 Peterborough County Federation of Agriculture on behalf of Peterborough County Cream Producers (Clifford Johnston)
 Peterborough Zone, Ontario Milk Distributors' Association (H. J. Fisher)
 Miss Gladys Suggitt
 Toronto Milk Producers' Association, District No. 3 (Russell Little)
 Toronto Milk Producers' Association, District No. 3—supplement—(Robert P. Reeds)

LONDON

John J. Daniels (read by Secretary)
 Melvin Elgersma (read by Secretary)
 Henry Groenenberg (read by Secretary)
 Michael Jopko (read by Secretary)
 Charles E. Lindsay
 London Zone, Ontario Milk Distributor's Association (Harold Swanson)
 London District Co-Operative Milk Producers' Association (A. S. Hare)
 Mrs. Blair Maxwell (read by Secretary)
 Middlesex County Cream Producers' Association (Hamilton Hodgins)
 The Producers and Manufacturers of Liquid Concentrated Milk (John H. Forde)
 Seiling Farms Limited (read by Secretary)
 Guernsey Cattle Breeders' Association of Ontario (read by Secretary)
 St. Marys Concentrated Milk Producers (William T. Langdon)

St. Thomas Milk Producers' Association (Robert Martin)
Sunny View Dairy, Hespeler (read by Secretary)
Verdun's Dairy Ltd. (Jan Verdun)
Merritt Wilcox (read by Secretary)

ORILLIA

Barrie Milk Producers' Association (Howard Crawford)
Glenville Farms (John Kudelka)
Lakeview Pure Milk Dairy Ltd. (Willard Kinzie)
Muskoka and Parry Sound Districts Whole Milk Producers
(Emerson Farnsworth)
Orillia Zone Ontario Milk Distributors' Association (Jack Hurl)

OTTAWA

Ayrshire Breeders Association of Canada (J. D. MacKechnie)
The Carleton County Federation of Agriculture (Donald Munro)
Consumers' Association of Canada, Ottawa Branch (Mrs.
Dorothy M. Horwood)
Federations of Agriculture for Prescott and Russell Counties,
Union des Cultivateurs Franco-Ontariens,
Cheese Producers for Prescott and Russell, and
Union des Fermières Franco-Ontariennes
(Honoré Bourdeau)
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Section 4

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The Committee is grateful to many persons for their participation in this study of the milk industry in Ontario. Contributions were of unequal value but each was important. We regret that, inevitably, the following list will be incomplete despite our serious efforts to include all who assisted us.

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Table 1

Number of Ontario Farms, 1921-61

Year	All Farms	Farms with Milk Cows
1921	198,053	171,336
1931	192,174	150,387
1941	178,204	*
1951	149,920	106,687
1956	140,602	94,948
1961	121,333	72,849

* Information not in source

Source: B

Table 2

Farm Population and Farm Labour Force in Ontario, 1921-63

Year	Farm Population (Thousands)	Farm Labour Force (Thousands)
1931	801	305
1941	704	270
1951	703	203
1961	524	172

Source: B, C

Table 3

Milk Cow Population and Total Milk Production in Ontario, 1921-61, 1963

Year	Milk Cows (Thousands)	Milk Production (Million Pounds)
1921	1,065	4,644
1931	1,118	5,248
1941	1,156*	5,544
1951	922*	5,050
1956	1,026*	5,626
1961	992*	6,271
1963	950*	6,541

* 2 years and over

Source: B, D, G.

Table 4

Milk Cows on Farms, Classified by Number Reported, 1951, 1956, 1961

Number of milk cows	1951	1956	Number of farms	1961	Cumulative total	Cumulative per cent
	Number of farms	Number of farms		Cumulative total		
Ontario:						
1	11,590	9,741	5,787	5,787	7.9	
2	9,409	6,215	3,912	9,699	13.3	
3-7	33,895	22,992	14,426	24,125	33.1	
8-12	28,797	24,819	16,341	40,466	55.5	
13-17	12,630	14,458	12,079	52,545	72.1	
18-32	9,238	14,302	15,937	68,482	94.0	
33-47	886	1,899	3,240	71,722	98.4	
48-62	160	367	762	72,484	99.5	
63-77	36	88	208	72,692	99.8	
78-92	23	45	82	72,774	99.9	
93 and over	23	22	75	72,849	100.0	
Total farms reporting	<u>106,687</u>	<u>94,948</u>	<u>72,849</u>			
All other provinces:						
1	58,152	45,549	28,748	28,748	12.2	
2	55,312	39,804	26,909	55,657	23.6	
3-7	147,012	112,670	81,478	137,135	58.1	
8-12	56,453	59,153	48,254	185,389	78.5	
13-17	18,371	25,234	24,440	209,829	88.9	
18-32	11,520	18,497	21,929	231,758	98.2	
33-47	1,147	2,065	3,184	234,942	99.5	
48-62	268	456	760	235,702	99.8	
63-77	81	132	214	235,916	99.9	
78-92	32	47	98	236,014	99.9	
93 and over	33	49	117	236,131	100.0	
Total farms reporting	<u>348,381</u>	<u>303,656</u>	<u>236,131</u>			

Source: A, B

Table 5

Farm Value of Milk Production, Ontario, 1957-63

Year	Used in Manufacture		Milk otherwise used			Total milk production
	on farms*	in factories	Fluid sales	Farm-home consumed	Fed on farms†	
(thousands of dollars)						
1957	511	75,930	82,672	5,526	9,348	173,987
1958	588	83,142	84,313	5,875	10,680	184,598
1959	637	93,149	85,812	6,468	12,819	198,885
1960	587	89,592	87,141	6,020	13,158	196,498
1961	429	92,513	85,785	5,453	13,199	197,379
1962	415	96,645	87,204	5,373	14,082	203,719
1963	299	103,570	89,062	5,925	15,186	214,042

* Farm butter only

† Includes values of skim milk and buttermilk retained on farms

Source: D

Table 6

Total Milk Production, Ontario, by Months, 1961-63

(excluding milk equivalents of cottage cheese)

	1961		1962		1963	
	'000 lbs.	% of average	'000 lbs.	% of average	'000 lbs.	% of average
January	379,414	73	401,971	75	433,141	80
February	359,248	69	373,956	70	395,296	73
March	454,814	87	471,902	89	480,858	88
April	518,238	99	528,249	99	562,317	103
May	624,061	120	649,824	122	650,560	120
June	722,087	138	712,189	134	714,509	131
July	645,382	124	630,427	118	654,150	120
August	622,042	119	631,674	119	643,723	118
September	567,057	109	563,628	106	570,410	105
October	529,589	101	535,517	100	530,813	98
November	430,619	82	453,229	85	451,497	83
December	410,406	79	442,909	83	442,506	81
Average	521,913	100	532,956	100	544,148	100

Source: E

Table 7

Average Milk Production per Cow, 1950, 1955, 1961

(Pounds of Milk)

	1950	1955	1961	% increase 1961 over 1950
Ontario	5,023	5,508	6,321	25.8%
Quebec	5,159	5,395	6,146	19.1
Maritimes*	4,980	5,290	5,971	19.9
Prairies*	4,252	4,848	5,490	29.1
B.C.	7,275	8,597	9,511	30.7
Canada*	4,912	5,379	6,139	25.0%

* weighted average

Source: D, J

Table 8

Farm Cash Income from Dairying, Ontario, 1950-63

Year	\$ Millions	Year	\$ Millions
1950	120.7	1957	158.7
1951	136.9	1958	167.5
1952	138.0	1959	179.0
1953	141.0	1960	176.8
1954	144.4	1961	178.3
1955	147.7	1962	183.9
1956	152.7	1963	192.6

Source: D, K

Table 9

**Average Farm Value of Milk and Cream Sold by Farmers,
Ontario, 1957-63**

	Creamery butterfat	Cheese Milk	Milk for con- centration and ice cream mix	Fluid Milk	Average of all Sales as Milk
	per lb. \$	per cwt. \$	per cwt. \$	per cwt. \$	per cwt. \$
1957	.61	2.49	2.61	4.57	3.04
1958	.64	2.49	2.62	4.65	3.07
1959	.70	2.86	2.61	4.71	3.21
1960	.68	2.48	2.63	4.84	3.15
1961	.67	2.41	2.55	4.84	3.08
1962	.67	2.67	2.57	4.83	3.11
1963	.70	2.84	2.61	4.88	3.19

Note: Value of creamery butterfat in 1957 and 1958 not fully comparable with 1959 and after, due to change in weighting relative quantities of milk and cream deliveries.

Source: D

Table 10

Growth of Bulk Milk Handling in Ontario, 1953-63

	Producers with Bulk Tanks	Number of Bulk Transports	Plants with Bulk Handling
1953	15	1	1*
1957	1,365	63	32
1960	6,322	274	116
1963	8,194	409	199

* Ideal Dairy—Oshawa

Source: H

Table 11

Utilization of Milk in Ontario, 1921-63

(in percentages of total milk production)

Year	Used in manufacturing			Fluid sales	Used on farms
	Creamery butter	Cheese	Concentrated milk and ice cream mix		
1921	—	—	—	51.4	13.2
1931	—	—	—	55.9	20.2
1941	—	—	—	64.5	22.0
1951	31.2	15.2	11.9	58.3	31.6
1956	33.1	12.4	11.7	57.2	34.4
1957	31.9	14.1	11.7	57.7	34.2
1958	35.4	13.0	11.0	59.4	32.8
1959	33.7	13.9	11.9	59.5	32.4
1960	32.9	13.7	13.6	60.2	32.1
1961	35.5	13.4	12.7	61.6	30.7
1962	37.0	13.2	11.4	61.6	30.6
1963	36.9	14.1	10.9	61.9	30.4

Source: D, G

Table 12

Per-Capita Consumption of Ice Cream and Fluid Milk and Cream in Ontario 1957-63

Year	Ice Cream (pints)	Fluid Milk and Cream (pints)
1957	18.88	297.57
1958	18.72	287.73
1959	20.56	283.07
1960	20.80	273.60
1961	21.12	263.68
1962	20.88	263.31
1963	21.76	262.51

Source: D

Table 13

**Principal Statistics of Dairy Products Industries
in Ontario, 1957-61**

	<u>No. of Establishments</u>	<u>No. of Employees</u>	<u>Selling Value of Factory Shipments (Million Dollars)</u>
1957	833	14,290	296
1958	800	14,800	322
1959	760	14,638	328
1960	738	14,750	338
1961	698	14,379	357

Source: F

Table 14

Exports and Imports of Dairy Products — Canada, 1900-63

(in millions of pounds)

Year	Exports						Imports	
	Butter	Cheese	Con-densed Milk	Eva-porated Milk	Whole Milk Powder	Skim Milk Powder	Butter	Cheese
1900	25.3	186.0	—	—	—	—	1.2	.3
1910	4.6	180.9	6.9*	—	—	—	.4	.7
1920	17.6	126.4	54.2*	—	—	—	.4	.4
1930	1.2	80.2	12.0	8.5	4.7†	—	38.6	1.8
1940	1.3	106.6	6.8	34.7	4.4	—	.0	1.0
1950	1.6	63.1	3.9	33.6	9.2	9.1	.0	10.2
1960	3.0	18.8	—	3.3	36.7	48.0	.0	13.2
1963	5.6	25.8	—	5.9	17.1	55.6	.0	15.4

* Includes exports of whole and skim milk powder and evaporated milk

† Includes skim milk powder

Source: D, K, L

Table 15
Production of Cheese in Ontario, 1900-63
 (in millions of pounds)

<u>Year</u>	<u>Cheddar</u>	<u>Specialty</u>
1900	132.0	
1910	136.1	
1920	92.8	
1930	81.3	
1940	100.0	
1950	70.3	
1951	65.9	2.7
1952	51.3	3.1
1953	59.8	3.6
1954	63.4	4.4
1955	59.5	4.7
1956	57.5	5.7
1957	65.3	6.8
1958	62.7	6.6
1959	69.0	7.3
1960	66.9	8.1
1961	68.0	7.8
1962	67.4	8.4
1963	73.8	8.9

Source: D, G, M

Table 16

Canadian Exports of Cheddar Cheese to the United Kingdom, 1946-63

Year	Millions of Pounds of Cheese	Year	Millions of Pounds of Cheese
1946	104.2	1955	12.6
1947	53.9	1956	10.9
1948	37.4	1957	7.5
1949	50.1	1958	14.9
1950	59.2	1959	19.2
1951	27.2	1960	17.7
1952	.1	1961	18.3
1953	14.8	1962	26.1
1954	4.0	1963	24.4

Source: G

Table 17

**Ontario Cheddar Cheese Production in 1963
Showing Basis of Settlement with Producers**

<u>Type of Factory</u>	<u>Co-operative</u>	<u>Outright</u>	<u>Total</u>
	<u>Basis</u>	<u>Purchase</u>	
(in millions of pounds)			
Privately owned	17.1	20.5	37.6
Joint-Stock	9.7	1.9	11.6
Other Co-operatives	12.3	2.8	15.1
Corporations	—	9.0	9.0
Cheese Produced	<u>39.1</u>	<u>34.2</u>	<u>73.3*</u>
Percentage of Total	<u>53%</u>	<u>47%</u>	<u>100%</u>

* It may be that the difference between this total and the figure of 73.8 million pounds shown in Table 15 arises from direct sales of cheese by factories to milk producers.

Source: N

Table 18

Production of Milk and Certain Dairy Products
By Province, 1953 and 1963

	Total Milk		Creamery Butter		Cheddar Cheese	
	millions of pounds	% of total	millions of pounds	% of total	millions of pounds	% of total
<u>1953</u>						
Prince Edward Island	208	1	5.7	2	0.5	1
Nova Scotia	438	3	6.0	2	—	—
New Brunswick	456	3	8.0	3	0.8	1
Quebec	5,577	34	112.2	37	10.8	14
Ontario	5,317	32	82.7	27	59.8	78
Manitoba	1,040	6	25.0	8	1.2	2
Saskatchewan	1,319	8	27.8	9	0.2	—
Alberta	1,368	8	30.0	10	2.8	3
British Columbia	725	5	5.4	2	0.6	1
Canada	16,448	100	302.8	100	76.7	100
<u>1963</u>						
Prince Edward Island	216	1	5.4	2	1.1	1
Nova Scotia	346	2	3.1	1	—	—
New Brunswick	367	2	6.4	2	0.5	—
Quebec	6,226	34	138.4	39	58.1	42
Ontario	6,541	36	103.1	29	73.8	54
Manitoba	1,049	5	24.9	7	0.8	1
Saskatchewan	1,112	6	26.9	8	—	—
Alberta	1,690	9	38.5	11	1.8	1
British Columbia	841	5	5.0	1	1.0	1
Canada	18,388	100	351.7	100	137.1	100

Source: D

Table 19:

**Sales of Fluid Milk by Licensed Commercial Dairies,
Ontario, 1960-64**

(in millions of quarts)

	Standard Fluid	Special Fluid	Partly Skimmed	Skim Milk	Total Fluid
1960	489.6	10.1	68.3	36.7	604.7
1961	481.0	7.7	84.3	36.6	609.6
1962	478.8	6.0	104.5	37.2	626.5
1963	471.2	5.0	129.5	37.2	642.9
(1964 (6 months)	230.0	2.0	77.1	19.1	328.2

Source: G, I

Table 20:

**Sales of Fluid Milk Classified by Size of Container,
Ontario, 1960-64**

(in millions of quarts)

	3-quart	2-quart	1-quart	Other	Total
1960	32.3	91.4	437.1	43.9	604.7
1961	42.9	104.1	418.2	44.4	609.6
1962	59.3	123.7	397.0	46.5	626.5
1963	81.6	139.0	374.5	47.8	642.9
(1964 (6 months)	55.4	78.6	169.7	24.5	328.2

Source: I

Table 21

**Per-Capita Consumption of Specified Dairy Products and Margarine
in the U.S. and Canada, 1950, 1956, 1961, and 1963**
(in pounds per-capita)

Year	Fluid Whole Milk		Evaporated Milk		Whole Milk Cheese		Cottage Cheese		Skimmed Milk Powder		Butter		Margarine	
	U.S.		Canada		U.S.		Canada		U.S.		Canada		U.S.	
	U.S.	Canada	U.S.	Canada	U.S.	Canada	U.S.	Canada	U.S.	Canada	U.S.	Canada	U.S.	Canada
1950	293	412*	18.1	17.5	7.7	5.6	3.1	0.6	3.7	3.4	10.7	22.3	6.1	6.8
1956	306	405*	13.7	18.6	8.0	6.4	4.5	1.1	5.2	5.1	8.7	20.5	8.2	7.7
1961	278	332*	10.7	16.5	8.5	7.5	4.6	1.3	6.2	8.4	7.4	16.5	9.4	10.1
1963	278	324*	9.3	15.7	9.3	8.2	4.5†	1.4	5.6	8.1	6.8	19.1	9.3	9.3

* All fluid milk products, including cream

† 1962 figure

Source: D, K, P

Table 22

**Estimated Consumption Per-Capita of Specified Dairy Products and Margarine
in Canada and Other Countries in 1962**

Fluid Milk gals.	Butter lbs.	Whole Milk Cheese lbs.	Milk Powders			Condensed Milk			Margarine lbs.	
			Skimmed		Whole Sweetened lbs.	Whole Sweetened lbs.	Whole Sweetened lbs.			
			Whole lbs.	Skimmed lbs.						
Canada	31.6*	17.9	8.1	0.2	7.2	16.2	0.9	0.4	10.0	
U.S.	27.0	7.2	9.1	0.3	5.3	—12.7—	—	4.7	9.3	
U.K.	31.7	20.1	10.5	1.8	2.5	4.3	1.0	2.4	13.2	
Australia	28.7†	23.8	6.6	2.5	4.3	6.7	2.5	1.1	9.3†	
Denmark	28.6	23.1	19.6	N/A	N/A	N/A	N/A	N/A	40.6	
Netherlands	35.3*	11.8	0.7	N/A	N/A	N/A	N/A	N/A	43.2	

† 1961 figures

* includes cream

N/A — not available

Source: D, O

Section 6

EXHIBITS

LIST OF EXHIBITS

- I The Ontario Cheese Producers' Marketing Board—Minutes of Special Board Meeting, August 17, 1964.
- II The Ontario Cheese Producers' Marketing Board—Minutes of Meeting, September 14, 1964.
- III Copy of letter dated August 31, 1964, from Hector C. Arnold to County Officials.
- IV Copy of Finley W. McLachlan Limited Budget Proposals for Extension to Existing Plant.
- V Copy of Wilfred Spencer & Sons Quotations on Erection and Completion of Warehouse Addition.
- VI Summary of Regulation 422—Cheese-Marketing.
- VII Bases.
- VIII Award for Milk for Manufacture into Concentrated Milk Products.
- IX Some Views on the Method of Implementing a Milk Marketing Plan.
- X Significance of Milk as a Food in Canada.
- XI Interplant Milk Transportation Costs.
- XII An Assessment of the Infra-Red Milk Analyser.
- XIII The Basis of Payment for Milk.
- XIV Fat Tests at Dairy Plants and by D.H.I.A.
- XV Excerpt from the Report of the Director of Investigation and Research, Combines Investigation Act, for the Year Ended March 31, 1961.
- XVI Hazards from Strontium-90 in Fallout.
- XVII Distribution of Milk Cows in Southern Ontario, 1963.
- XVIII Distribution of Fluid Milk Shippers to Major Markets, 1963.
- XIX Distribution of Fluid Milk Plants, 1964.
- XX Distribution of Cheese Factories, 1964.
- XXI Distribution of Creameries, 1964.
- XXII Distribution of Condenseries and Powder Plants, 1964.

Exhibit 1

THE ONTARIO CHEESE PRODUCERS' MARKETING BOARD

MINUTES OF THE SPECIAL BOARD MEETING,

AUGUST 17th, 1964

Committee's Note: In Part B, Section 4, we quote extracts from minutes of meetings held by The Ontario Cheese Producers' Marketing Board. The most significant quotations are from minutes of a special Board Meeting held August 17, 1964, and these should be related to the minutes of a regular meeting held on September 14, 1964. In order to avoid any possible suggestion that we have taken these items out of context, we have reproduced, as Exhibits I and II, the full minutes of both meetings, exactly as shown in a certified copy received from the Secretary of the Board.

**THE MINUTES OF A SPECIAL BOARD MEETING HELD IN
THE HEAD OFFICE, BELLEVILLE, ONTARIO,
MONDAY, AUGUST 17th, 1964.**

The Chairman, Mr. H. C. Arnold, called the meeting to order at 9:30 a.m.

Directors present were Messrs: H. C. Arnold, R. J. Kelso, A. E. Hicks, R. P. Rupert, N. M. Cowan, A. G. Sloan and R. H. Willows. J. A. Johnston recorded the minutes.

Moved by R. J. Kelso

Seconded by R. H. Willows

That the notice calling the meeting be waived—Carried.

The minutes of the last regular meeting, August 7th, 1964, were read by the Secretary.

Moved by A. E. Hicks

Seconded by N. M. Cowan

That the minutes of the regular meeting, August 7th, 1964, be adopted and approved as read—carried.

Correspondence:

The correspondence was read and dealt with in the usual manner.

Moved by R. P. Rupert

Seconded by A. G. Sloan

That the Ontario Cheese Producers pay the expenses of the English visitors on the Trade Mission while touring this area—Carried.

There was a general discussion on the Cheese Centennial held at Upper Canada Village.

Mr. Arnold advised the meeting that in the beginning of the discussion of the Cheese Centennial, the trade agreed to contribute to the Centennial Fund. However, since that time, things have changed and the trade did not contribute to the Fund. He stated the Ontario Government had agreed to contribute \$13,000.00 and asked the Ontario Cheese Producers to match it.

At 10:00 a.m., Mr. Tom Dixon, entered the meeting.

Mr. Arnold continued his explanation and said some people wondered why a cheese manufacturer introduced the guest speaker. He said there were not many farmers present but they were paying half the expenses.

Moved by A. G. Sloan

Seconded by A. E. Hicks

That as many Board Members as possible attend the unveiling of the Cairn at Norwich, Ontario, Saturday, August 22nd, 1964—Carried.

Chairman's remarks:

The Chairman stated he had called this meeting to discuss the current controversy in the country regarding the Ontario Cheese Producers. He said this organization is the best farm organization on the North American Continent. No other farm group can price product the same as us, he stated.

The Chairman said he had visited Eastern Ontario last week and it seems, he said, we are rotten at the core from the information he received. Mr. Arnold said he had invited Mr. Tom Dixon to attend the meeting for some of the things that happened had been done when Mr. Dixon was on the Board. He listed the items of discussion as—

1. The addition to the Warehouse at Belleville without calling tenders.
2. The purchase of the property at Oxford Station. The Deed shows a price for \$33,000.00 and everyone knows Mr. Sanderson received \$60,000.00 Another is that some of the property that you men bought at Oxford Station was on Railroad property and you didn't know it and can't get a Deed of the land.

Mr. Arnold stated that he had spent last week in Eastern Ontario running these rumors down. The difference of \$27,000.00 was not shown on the Deed and some farmers thought there was a kick-back to the Directors. He stated that many of the farmers have a photo copy of the Deed of Oxford Station with them.

3. The present price for export cheese.

Another rumor he heard was that the sales staff could sell cheese at a higher figure if they would sell to smaller firms instead of the larger ones. He stated, you have been called in to clean this up. Mr. Willows said, his inquisitors had asked him if Canadian Buyers would pay more for cheese and if the United Kingdom Importers would. He said he was in no position to answer this question.

Mr. Cowan stated that the Honourable Harry Hays, at the meeting in Ottawa, had said Quebec cheese sold for one cent more than Ontario cheese. Mr. Arnold explained this by saying that prices quoted for Ontario Cheese are on large white but Quebec makes only squares. Mr. Arnold said Lac St. Jean Co-operative have to hold the cheese until they are sold which gives them age and makes them worth more and there could be another cent for holding charges but they are squares anyway. Ontario blocks sell for $1\frac{1}{2}$ cents premium above the large white he stated, Quebec cheese are sold as blocks at $36\frac{1}{2}$ cents but there is no premium like those for Ontario blocks. If Quebec raw-milk cheese are sold the price is $36\frac{3}{4}$ cents, he said.

Mr. Arnold stated he wanted to go over each of the items separately and read the minutes concerning them.

1. The first discussion would be regarding the extension to the Belleville Warehouse and we would read the minutes regarding it. The Secretary read the minutes of September 11th, 1961, the minutes of October 5th and October 6th, 1961. The minutes of January 24, 1962, and December 10, 1962, were read.

Mr. H. C. Arnold read the tender or quotations from W. Spencer & Sons of November 30, 1961. J. A. Johnston read the tender from Finley McLachlan dated October 5th, 1961, giving a quotation on the proposed extension to the Belleville Warehouse.

The Secretary read the minutes of February 8, 1963, and June 3, 1963. The Secretary read the minutes of March 2nd regarding the authorization given for the Opening of the New Building and the painting of it, etc.

The Chairman declared the meeting adjourned at 12:20 p.m.

The meeting reconvened at 1:40 p.m.

The Chairman stated the next item for discussion was the Oxford Station Deed on the difference of the money shown on it and approval given by Mr. H. C. Arnold for no search of property title. Mr. Arnold read the document which is attached to the Deed as signed by him. There was a discussion on this subject. The copy of the Deed and the lease was presented.

The Secretary read the minutes of April 17, 1963, May 7, 1963 and June 3, 1963.

Moved by N. M. Cowan

Seconded by A. G. Sloan

That the Directors of The Ontario Cheese Producers' Marketing Board accept, the Search of the Title of Oxford Station property made by Mr. H. C. Arnold and Mr. A. E. Hicks—Carried.

3. Mr. Arnold said the sale of cheese was the next topic to discuss.

He stated there were rumors that cheese could be exported at higher prices. He advised the meeting that the cheese were sold this year at 35 cents, Montreal. Some small firms have offered higher prices for June cheese he said.

Mr. Willows stated that Cheese Producers are not in as good a position as the butter powder producers because—

A. (The butter powder producers) are receiving higher prices.

Some producers in his factory may leave the plant and install bulk tanks and ship to the powder plants.

Moved by R. P. Rupert

Seconded by A. E. Hicks

That the Directors of The Ontario Cheese Producers' Marketing Board are satisfied with the policy on the export price of cheese being used at the present time in 1964, by H. C. Arnold and J. A. Johnston and have no criticism to offer—Carried.

Moved by R. P. Rupert

Seconded by A. E. Hicks

We, The Ontario Cheese Producers' Marketing Board, assemble here in Belleville on August 17th, 1964, have investigated all the records and the minutes of all Board Meetings where reference has been made to the building of an addition to the Belleville Warehouse. We find by the minutes there was approval by the Board on the following—

- 1) That nothing has been done without the full knowledge and consent of the whole Board.
- 2) On account of the experienced staff, we had in connection with warehouse operations, namely, Kenneth Long, Engineer, Grayden Colwill, Manager, Belleville Warehouse, J. A. Johnston, Secretary.

The Board decided against putting the building in the hands of architects, on account of the expense involved. Rather that we would solicit from several contractors detailed prices or quotations, more commonly known as Tenders.

Offers to build said addition, at certain definite prices were received from two firms—Messrs. Wilfred Spencer & Sons and Finley McLachlan.

We have here examined the Tender of Wilfred Spencer & Sons, which specifies a cement block building with cement concrete slab roof. The roof, beams and columns to be as engineered and planned by the Wilson Concrete Company, Belleville. Also to construct the machine room 20 by 33 as shown on plan. These and other specifications, as shown, for the sum of \$122,800.00 and on revision it was raised to \$126,544.00.

The Tender from Finley McLachlan was of a steel beam construction and his prices included, refrigeration equipment and offices. It was for the sum of \$249,129.00 for butter operation and \$221,537.00 for cheese operation (prepared for deep freeze). These prices were received and discussed at a meeting duly called with all Board Members present on Friday, October 6th, 1961.

For various reasons it was decided by the Board they would not proceed with the extension at that time. It was left without any further action until June 3, 1963. At a Board Meeting it was duly Moved by A. E. Hicks and Seconded by Nelson Cowan that J. A. Johnston be authorized to sign a contract with Wilfred Spencer & Sons and the refrigeration contract, with Creamery Package.

The Board finds everything in order and assumes full responsibility in connection with the building of this warehouse as it now is one of the best up-to-date and modern cheese warehouses in the Province of Ontario and possibly the Dominion of Canada. A great deal of credit is due to Wilfred Spencer & Sons, Contractors, for

the well planned and efficient job they have done in building this addition—Carried.

Moved by R. P. Rupert

Seconded by A. E. Hicks

We have also examined all records, the minutes of all Meetings, pertaining to the purchasing of Oxford Station and Plantagenet Warehouse in the year 1963.

After a thorough investigation, we find there has been nothing done without the approval of the Board. There is nothing in the minutes to show but that every motion in this connection was endorsed by the Board of Directors.

The cost of the two warehouses, some \$93,000.00, included land, buildings, refrigeration, equipment, trucks, garages, etc. The Board can find absolutely nothing that has been done without their full knowledge and consent and also finds everything in connection with those transactions in order and believe it a safe and sound investment for the cheese farmers of the Province of Ontario—Carried.

The Chairman declared the meeting adjourned at 4:55 p.m.

Signed

J. A. JOHNSTON,
Secretary.

Approved

H. C. ARNOLD,
Chairman.

Exhibit II

THE ONTARIO CHEESE PRODUCERS' MARKETING BOARD
MINUTES OF MEETING, SEPTEMBER 14th, 1964

THE MINUTES OF A REGULAR MEETING OF THE ONTARIO
CHEESE PRODUCERS' MARKETING BOARD, BELLEVILLE,
ONTARIO, MONDAY, SEPTEMBER 14th, 1964.

A Regular Meeting of The Ontario Cheese Producers' Marketing Board was held in the Head Office, Belleville, Ontario, Monday, September 14th, 1964. The Chairman, Mr. H. C. Arnold, called the meeting to order at 9:35 a.m.

Directors present were Messrs: H. C. Arnold, R. J. Kelso, N. M. Cowan, A. E. Hicks, R. P. Rupert, R. H. Willows and A. G. Sloan. J. A. Johnston recorded the minutes.

Moved by A. G. Sloan

Seconded by R. H. Willows

That the notice calling the meeting be waived—carried.

The minutes of the Special Meeting held August 17th, 1964, were read by the Secretary.

Moved by A. E. Hicks

Seconded by R. P. Rupert

That the minutes of the Special Meeting held in the Head Office, Belleville, Ontario, August 17th, 1964, be approved and adopted as read—carried.

There was a discussion on tenders regarding the extension of the Belleville Warehouse.

R. J. Kelso requested that it be recorded in the minutes that he objected to the motion regarding the Search of the Title of the Oxford Station Property made by Messrs. H. C. Arnold and A. E. Hicks.

There was a general discussion of the purchase of the property at Oxford Station.

The Chairman, Mr. H. C. Arnold, wanted it recorded in the minutes that he had suggested to the Board that a thorough Search of the Title and a survey of Oxford Station property be made and, if anything was found wrong, he, Mr. Arnold, would personally pay the costs of the Search and the Survey. However, no action was taken by the Board on Mr. Arnold's suggestion.

Messrs. A. G. Sloan, N. M. Cowan and R. P. Rupert wanted it recorded in the minutes that they were satisfied with the Search made of Oxford Station property by the two members of the Board, Messrs. H. C. Arnold, and A. E. Hicks.

The statements of August cheques issued by the Marketing Board, the Belleville, Winchester, Oxford Station and Plantagenet Warehouses were read by the Secretary.

Moved by R. P. Rupert

Seconded by N. M. Cowan

That the statements of August cheques for the Marketing Board, Belleville, Winchester, Oxford Station and Plantagenet Warehouses be accepted and approved as read—carried.

Correspondence:

The correspondence was read and dealt with in the usual manner.

There was a discussion on flies in cheese which resulted from a letter from Black Diamond Limited, Belleville, Ontario.

The Chairman declared the meeting adjourned at 12:05 p.m.

The meeting reconvened at 2:47 p.m.

The accounts were presented by the Secretary.

Moved by N. M. Cowan

Seconded by R. P. Rupert

That the invoice for the costs of the Opening at Upper Canada Village be presented by the Chairman of the Cheese Centennial Committee be paid—carried.

Moved by R. P. Rupert

Seconded by R. H. Willows

That The Ontario Cheese Producers pay the costs of the Unveiling of the Cairn at Norwich, Ontario, August 22nd, 1964, as presented by the Chairman of the Cheese Centennial Committee, Mr. J. M. Bain,—carried.

General Business:

- a) The Secretary advised that arrangements had been made to hold the next County Presidents Meeting at the Royal York Hotel, Toronto, Ontario, November 16th, 1964, at the time of the Royal Winter Fair.
- b) *The Annual Meeting.* It was suggested the Secretary write Mr. Frank Ryan inviting him to be the Guest Speaker at the Banquet of the Annual Meeting of the Ontario Cheese Producers' Marketing Board.

Moved by A. E. Hicks

Seconded by A. G. Sloan

That Mr. Frank Ryan be invited to be the Guest Speaker for the Banquet at the Annual Meeting, Thursday evening, January 7th, 1965, Chateau Laurier Hotel, Ottawa, Ontario,—carried.

The Secretary was also authorized to write the Booking Agency in Ottawa regarding entertainment for the Annual Banquet.

The Chairman's remarks:

The Chairman mentioned the rumor that is circulating in England that the days of the export business of The Ontario Cheese Producers is limited or numbered. Mr. Arnold said the Cheese Producers are "sitting ducks". The Milk Industry Inquiry Committee, he said, is going to bring down a report and it may not be favourable to The Ontario Cheese Producers. Many people will go along with their report whether it puts the Ontario Cheese Producers out of the export business or not, he commented. Members of the Board should listen for any rumors about the report, he stated. Mr. Arnold said he had spoken to the Honourable W. A. Stewart about this subject. He further stated that many of the good things The Ontario Cheese Producers has gained could be taken away from them, such as its assets, buildings and property, etc. Cheese Producers built the warehouses and why should the Whole Milk or the Concentrated Milk step in and have a share of our money, he asked. Mr. Arnold said he had told the Minister of Agriculture he favored a Milk Marketing Scheme but the Ontario Cheese Producers business should not be taken away from them any more than the business of the United Co-operatives which is a farm organization the same as our Co-operative that handles cheese. Mr. Arnold said he discussed the subject with our lawyer. He read a letter from the lawyer regarding the Marketing of Cheese and Milk. The lawyer thought an arrangement could be made similar to the Eggs and Fowl

Marketing Plan. The Cheese Producers would negotiate a price for cheese milk and the licence fees would be collected from the cheese when it was sold, he explained.

Mr. Arnold said The Ontario Cheese Producers may have to take a stand if we are not going to be put out of the cheese business. There is some talk, he said, that the new board, if established, may be a government board.

The other milk groups have nothing to lose because they have no money and no business. Mr. Arnold said the Ontario Cheese Producers should make its stand known and not be allowed to be swallowed up into something.

This report, he said, could be brought in on fairly short notice. The Chairman said he had told the Honourable W. A. Stewart that he did not like the way the Chairman of the Milk Industry Committee carried on his interviews with some of the Directors and not with others. He stated that Professor Hennessey came to visit him, Mr. Arnold, and asked him many questions.

Mr. Arnold said he had prepared a draft letter and read it to the Board Members. He advised the Directors they could use some of the topics or proposals in the letter to take to their members of Parliament to discuss the present situation of the Inquiry Committee.

It was unanimously agreed by the meeting that a letter be composed and be forwarded to the Honourable W. A. Stewart and that a copy be sent to each of the Board Members.

The Secretary presented the proposal for the purchasing of the Accounting Machine.

Moved by N. M. Cowan

Seconded by A. E. Hicks

That the Ontario Cheese Producers purchase the basic National Cash Register number 395 Electronic Accounting Machine and rent the balance of the equipment required —carried.

Mr. Arnold stated that the C.B.C. was going to interview him Tuesday morning in Toronto, for a story on the Ontario Cheese Producers. He said this would be a good chance to get some promotion for the organization.

The Chairman declared the meeting adjourned at 3:35 p.m.

Signed

J. A. JOHNSTON,
Secretary.

Approved

H. C. ARNOLD,
Chairman.

Exhibit III

**COPY OF LETTER DATED AUGUST 31, 1964, FROM
HECTOR C. ARNOLD TO COUNTY OFFICIALS**

To County Officials:

Dear Sir,

On account of false rumours that have been circulated in your district with reference to not calling tenders for the addition to the Belleville Warehouse, we are sending you some of the minutes taken from a regular Board Meeting held on the 7th day of October, 1961, which speaks for itself.

One of the minutes of that meeting is outlined in Resolution No. 1 of the attached sheet regarding the proposed extension to the Belleville Warehouse. The tenders by Messrs. Finley McLachlan and Wilfred Spencer were outlined to the meeting by the Building Committee. This meeting was attended by all members of the Board at that time, namely Messrs. Arnold, Kelso, Hicks, Cowan, Dixon, Grant and Coon.

On August 17th, 1964, at a special meeting to deal with these rumours with the present Board all in attendance, namely Messrs. Arnold, Kelso, Hicks, Cowan, Willows, Rupert and Sloan the enclosed motions were duly passed.

Copies of the above mentioned tenders or any other information may be obtained by writing to the office or to me personally.

Yours very truly,

THE ONTARIO CHEESE PRODUCERS' MARKETING BOARD

H. C. ARNOLD,
Chairman

HCA/gh

Committee's Notes:

- (i) There is no record of a Board meeting on the 7th day of October, 1961, but meetings were held on the 5th and 6th days of October, 1961.
- (ii) Resolution No. 1 referred to in this letter is reproduced on pages 279 and 280 following. This Resolution does not appear in the minutes of the Board meetings held in October 1961. It does appear, with minor modifications, as a motion in the minutes of the Special Board Meeting held on August 17, 1964. See Exhibit I, page 268.

RESOLUTION NO. 1

We, The Ontario Cheese Producers' Marketing Board, assembled here in Belleville on August 17th, 1964, have investigated all the records and the minutes of all Board Meetings where reference has been made to the building of an addition to the Belleville Warehouse. We find by the minutes there was approval by the Board on the following—

- I. That nothing has been done without the full knowledge and consent of the whole Board.
- II. On account of the experienced staff, we had in connection with warehouse operations, namely:—Mr. Kenneth Long, Engineer,
Mr. Grayden Colwill—
Manager, Belleville Warehouse,
J. A. Johnston—Secretary

the Board decided against putting the building in the hands of architects, on account of the expense involved. Rather that we would solicit from several contractors detailed prices or quotations, more commonly known as tenders.

Offers to build said addition, at certain definite prices, were received from two firms:—

Messrs. Wilfred Spencer & Sons
and
Finley McLachlan

We have here examined the tender of Wilfred Spencer and Sons, which specifies a cement block building with cement concrete slab roof. The roof, beams and columns to be as engineered and planned by the Wilson Concrete Company, Belleville. Also to construct a machine room 20 by 33 as shown on plan. These and other specifications, as shown, for the sum of \$126,544.00.

The tender from Finley McLachlan was of a steel beam construction and his prices included refrigeration equipment and offices. It was for the sum of \$249,128.00 for Butter Operation and \$221,537.00 for Cheese Operation (prepared for Deep Freeze).

These prices were received and discussed at a meeting duly called with all Board Members present on Friday, October 6th, 1961.

For various reasons it was decided by the Board they would not proceed with extension at that time. It was left without any further action until June 3rd, 1963. At a Board Meeting it was duly moved by A. E. Hicks and Seconded by Nelson Cowan that J. A. Johnston be authorized to sign a contract with Wilfred Spencer and Sons and a refrigeration contract with Creamery Package.

The Board finds everything in order and assumes full responsibility in connection with the Building of this warehouse as it now is one of the best up-to-date and modern cheese warehouses in the Province of Ontario and possibly the Dominion of Canada. A great deal of credit is due to Wilfred Spencer and Sons, Contractors, for the well planned and efficient job they have done in building this addition.

RESOLUTION NO. 2

We have also examined all records, the minutes of all meetings, pertaining to the purchasing of Oxford Station and Plantagenet Warehouse in the year 1963.

After a thorough investigation, we find there has been nothing done without the approval of the Board. There is nothing in the minutes to show but that every motion in this connection was endorsed by the Board of Directors.

The cost of the two warehouses some \$93,000.00 included land, buildings, refrigeration, equipment, trucks, garages, etc. The Board can find absolutely nothing that has been done without their full knowledge and consent and also find everything in connection with these transactions in order, and believe it a safe and sound investment for the cheese farmers of the Province of Ontario.

RESOLUTION NO. 3

That the Directors of The Ontario Cheese Producers' Marketing Board are satisfied with the policy on the export price of cheese being used at the present time in 1964, by H. C. Arnold and J. A. Johnston and have no criticism to offer.

Carried

Exhibit IV

**COPY OF FINLEY W. McLACHLAN LIMITED
BUDGET PROPOSALS FOR EXTENSION TO EXISTING PLANT**

Toronto, October 5th, 1961.

Ontario Cheese Producers' Marketing Board,
Wills Street,
Belleville, Ontario.

Attention: Mr. Arnold Jackson

Re: Proposed Extension to Existing Plant

Dear Sir:

The following is in confirmation of the meeting held at your office yesterday between the writer and Messrs. R. Jones and J. Paterson and your Mr. Wilde.

We have pleasure in confirming our budget proposals for the above in conformance with the sketch plans and outline specification left with Mr. Wilde, for supplying of all necessary labour, materials and plant equipment required for the proper construction of the above.

	Butter Operation	Cheese Operation
		(Prepared for Deep Freeze)
Basic Building	\$249,128.00	\$221,537.00

Add as discussed with Mr. Wilde

1. Finishing two bays (about 1,700 sq. ft.) of the Mezzanine floor as offices, including vinyl asbestos floor tile, plaster walls, acoustic tile ceilings, sound reducing wall next equipment, steel sash, painting, lighting fixtures, underfloor duct with outlets for desks and convector radiator heating, etc.	6,700.00	6,700.00
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2. Allowance for bringing in 8"		
sprinkler main only	6,000.00	6,000.00
3. Allowance for removing septic bed and providing temporary septic field until sanitary main is available	2,500.00	2,500.00
TOTAL BUDGET COVERAGE	\$264,328.00	\$236,737.00

The total cost for sprinklering this extension only, included in the above proposals, is as follows:

Dry sprinkler system within the new extension	\$ 5,435.00
Valve chamber built on East wall	450.00
Sprinkler main as mentioned in item 3	6,000.00
	\$11,885.00

This new extension will provide the following gross areas:

Main floor	13,175 sq. ft.
Mezzanine floor	2,800 sq. ft.
Total gross area	15,975 sq. ft.

We trust the above information is to your satisfaction and that we may have the pleasure of carrying out this work for you in the near future. However, should you have any queries, please do not hesitate to call us.

Yours very truly,

H. FORSYTH,

FINLEY W. McLACHLAN LIMITED

HF:RMG

c.c: Mr. H. C. Arnold

Mr. Wilde

Exhibit V**COPY OF WILFRED SPENCER & SONS QUOTATIONS ON
ERECTION AND COMPLETION OF WAREHOUSE ADDITION**

Campbellford, November 30, 1961

The Ontario Cheese Producers' Marketing Board
Box 416,
Belleville, Ontario

Dear Sirs:

We, the undersigned contractors, having examined your site and the plans of the proposed addition to the warehouse, wish to quote on the erection and completion of the addition as follows:

- To construct Cold Storage Warehouse as per plan No. E-G-V-100;
- To Insulate for Zero - 10°F. in 3 large rooms using 6" Cork Insulation to plans and specifications provided by Ontario Cork Company.
- To Insulate for grading room for temperature of 56°F. as Ontario Cork Co. plans and specifications.
- To provide under floor heating as per plans and specifications of Elgee Products Limited.
- Roof Slabs and Blocks, Beams and Columns as engineered and planned by Wilson Concrete Products.
- To provide and erect 5 - freezer cold storage doors and 1 cooler cold storage door, all 8' x 8'.
- Drainage, Heating and Plumbing, as laid out by T. J. Holland & Co., drains to terminate 5' outside building.
- Electrical Wiring as laid out in plan and specifications of Acme Electric Ltd. The connection of motorized equipment is estimated at 1220.00 and may run more or less.

To construct Machine Room 20' x 33' as shown on plan providing 2 steel sash windows and one 3'0 x 7'0 door, metal covered.

Roofing of both above to be 20 year 5 ply tar and gravel roof with 1" rigid insulation under.

To construct Loading Dock at Railway siding to same specifications as existing dock, using dock and track hardware now on hand.

The following price does not include for office finish or for temporary septic tank and weeping bed installation.

Our quotation for the above work is \$122,800.00

(One Hundred and Twenty-two Thousand, Eight Hundred Dollars)

Thanking you for this opportunity of quoting on your work and hoping to be of further service to you,

I remain,

Yours truly,

WILFRED SPENCER.

**CONTRACT
BETWEEN**

**Ontario Cheese Producers' Marketing Board,
&/or Ontario Cheese Producers' Co-Operative Ltd.,
and Wilfred Spencer & Sons**

June 3, 1963

BELLEVILLE, Ontario

Dear Sir:

The undersigned proposes to furnish all materials and perform all labour necessary to complete the following contract:

Addition to Cold Storage 121'6" x 100' as shown on plans prepared by Wilson's Concrete Products #E-GU-100 and #E-GU-101 and the accompanying specifications.

All of the above work to be completed in a substantial and workmanlike manner for the sum of

One hundred and twenty-two thousand (\$122,000.00) Dollars.

Payments to be made according to the following terms:

Payments to be made monthly, 85% of value of Labour & Material delivered to the job. Contractor to supply breakdown of approximate cost of each part of work. Balance to be paid 38 days from completion.

Any alteration or deviation from the above specifications involving extra cost of material or labour will only be executed upon written orders for same, and will become an extra charge over the sum mentioned in this contract. All agreements must be made in writing.

This proposal is made on the basis of current material and labor costs. A delay in acceptance of more than 30 days will require a review of the proposal and re dating before the agreement becomes binding.

Respectfully submitted,

WILFRED SPENCER

Contractor

W. Spencer & Sons

ACCEPTANCE

You are hereby authorized to furnish all materials and labour to complete the work mentioned in the above proposal, for which the undersigned agrees to pay the amount mentioned in said proposal, and according to the terms thereof.

**The Ontario Cheese Producers' Marketing Board
&/or Ontario Cheese Producers' Co-operative Ltd.**

per—J. A. JOHNSTON

Secretary

Date: June 3, 1963

**CONTRACT
BETWEEN**

**Ontario Cheese Producers' Marketing Board,
&/or Ontario Cheese Producers' Co-Operative Ltd.,
and Wilfred Spencer & Sons**

June 3, 1963

BELLEVILLE, Ontario

Dear Sir :

The undersigned proposes to furnish all materials and perform all labour necessary to complete the following contract:

Machine room for equipment, as shown on Wilson's Concrete Products Plan No. E-GU-100 and No. E-GU-101 and the accompanying specifications. Also, block for new Cooler outside and break out existing concrete & haul away.

All of the above work to be completed in a substantial and workmanlike manner for the sum of

Four thousand, five hundred and forty-four (\$4,544.00) Dollars.

Payments to be made according to the following terms:

Payments to be made monthly, 85% of value of Labour and Material delivered to job. Contractor to supply breakdown of approximate cost of each part of work. Balance to be paid 38 days from completion.

Any alteration or deviation from the above specifications involving extra cost of material or labour will only be executed upon written orders for same, and will become an extra charge over the sum mentioned in this contract. All agreements must be made in writing.

This proposal is made on the basis of current material and labor costs. A delay in acceptance of more than 30 days will require a review of the proposal and re dating before the agreement becomes binding.

Respectfully submitted,

WILFRED SPENCER

Contractor

Wilfred Spencer & Sons

ACCEPTANCE

You are hereby authorized to furnish all materials and labour to complete the work mentioned in the above proposal, for which the undersigned agrees to pay the amount mentioned in said proposal, and according to the terms thereof.

**The Ontario Cheese Producers' Marketing Board
&/or Ontario Cheese Producers' Co-operative Ltd.**

per—J. A. JOHNSTON

Secretary

Date: June 3, 1963

Exhibit VI

SUMMARY OF REGULATION 422 — CHEESE-MARKETING

- (i) All producers of cheese are deemed to be licensed. Buyers of cheese must be licensed by The Milk Industry Board.
- (ii) The Ontario Cheese Producers' Marketing Board is authorized to:
 - require persons producing or marketing cheese to register with them and furnish information as required and to allow inspection of their records and premises;
 - stimulate, increase, and improve the marketing of cheese by such means as it deems proper; to co-operate with any other provincial agency in the marketing of cheese and to do such things as are necessary in carrying out the provisions of the Act, regulations, and plan;
 - make such exemptions as it sees fit from the regulations, and regulate and control the marketing of cheese including the times and places at which cheese may be marketed;
 - require payments to producers to be made to or through the Board;
 - prohibit the marketing of any type of cheese;
 - use licence fees and other moneys payable to it for the purpose of paying its expenses and to carry out and enforce the purposes of the plan.
- (iii) Every producer shall pay licence fees at the rate of 1/10c per pound of cheese produced, to be deducted from payments received from buyers of cheese sold through an exchange, or to be deducted and remitted by buyers of cheese sold otherwise.
- (iv) All cheese (except where the Board provides an exemption) must be sold through a cheese exchange designated and operated by the Board.
- (v) Provision is made for a negotiating committee, comprised of five producer appointees and five buyer appointees, to adopt or settle by agreement,
 - minimum prices for cheese,
 - terms, conditions, and forms of agreement relating to the marketing or producing of cheese,
 - any charges, costs, or expenses relating to the production or marketing of cheese.
- (vi) Provision is made for a board of arbitration should the negotiating committee fail to agree.

Exhibit VII**BASES**

Committee's Note: Following are excerpts from two United States Federal Milk Marketing Orders. They are included in order to indicate the general nature of the current arrangements in two jurisdictions that are similar to southern Ontario in many respects. We do not suggest that any of the detailed provisions are exactly applicable to southern Ontario. They are simply useful guides when thinking of what should be done here.

(a) The Minneapolis-St. Paul, Minnesota Marketing Area**DETERMINATION OF BASES****1068.75 Computation of base for each producer.**

(a) Subject to the provisions of 1068.77, each producer whose milk is received . . . during any portion of the period July-October, inclusive, shall have a daily base computed by the market administrator, to be applicable during the following January through June, inclusive, equal to the total pounds of such producer's milk eligible for sale in fluid form as Grade A milk so received in the 4-month period divided by the number of days of such receipt or by 105, whichever is greater.

(b) Any producer not eligible to receive a base pursuant to the provisions of paragraph (a) of this section, including any producer for whom a base may not be computed pursuant to paragraph (a) of this section because of lack of information concerning such producer's deliveries in the applicable July-October period, shall have a base for each of the months of January through June equal to 30 percent of such producer's deliveries to a pool plant during such month.

1068.76 Establishing new bases.

Any producer for whom a base has been established pursuant to 1068.75 (a) may relinquish such base for the following base-paying period by notifying the market administrator prior to December 31. The daily base of such producer shall then be determined pursuant to 1068.75(b).

1068.77 Base rules.

- (a) A base shall apply to deliveries of milk by the producer for whose account that milk was delivered during the base-forming period.
- (b) The base of a producer may be . . . transferred from such producer to another producer: *Provided*, That all deliveries of milk by a producer who has transferred his base to another producer shall be excess milk until July 1 next following such transfer.
- (c) In applying the provisions of 1068.75 in the case of a producer on every-other-day or every-third-day delivery of his milk, the days of non-delivery intervening days of delivery shall be considered as days of delivery.

(b) The South Michigan Marketing Area

BASE RULES

924.70 Determination of base.

- (a) A producer who delivered milk on at least 122 days during the period August 1 through December 31, inclusive, of any year shall have a base computed by the market administrator to be applicable, subject to section 924.72, for the 12 months period beginning the following February 1, equal to his daily average milk deliveries from the date on which milk was first delivered in the period to the end of such August 1-December 31 period: *Provided*, That a producer who had a base on December 1 and whose average of daily deliveries for the August 1-December 31 period is less than such base shall have a base computed by subtracting from his previous base any amount by which 90 percent of his previous base exceeds such average of daily deliveries;
- (b) A producer with an established base who does not forfeit his base pursuant to section 924.71(c) but who fails to deliver milk on at least 122 days of the August 1 through December 31 period shall have his base for the 12 months beginning the following February 1 computed by dividing the total pounds shipped during the period by 122;
- (c) Except as provided in paragraphs (d), (e), (f) and (g) of this section a producer who has no base shall be paid until February 1 following the August-December period within which he establishes a base pursuant to paragraph (a) of this section at the adjusted uniform price. . . .

(g) Through January 1961 a producer who has no base (or who relinquishes his base pursuant to section 924.72) shall be paid during the first three full months he is a producer the uniform price in each of the months of August through December and in other months, the price applicable to base milk for the following percentages of his milk deliveries and the prices applicable to excess milk for the remainder of his deliveries; 75 percent for January and February. . . .

924.71 Application of bases.

(a) A base shall apply to deliveries of milk by the producer for whose account milk was delivered during the base period. . . .

(b) Bases may be transferred under the following conditions upon written notice by the holder of the base to the market administrator on or before the last day of the month that such base is to be transferred;

(c) A producer who does not deliver milk to any handler for 45 consecutive days shall forfeit his base except that the following producers may retain their bases without loss for 12 months;

(1) A producer who suffers the complete loss of his barn as a result of fire or windstorm; or

(2) A producer for whom loss of 50 percent or more of the milk herd from brucellosis or bovine tuberculosis, is shown by evidence issued under state or Federal authority.

924.72 Relinquishing a base.

A producer with a base, by notifying the market administrator that he relinquishes such base, may be paid pursuant to the provisions of section 924.70(c) applicable to a producer without a base beginning with the first day of the month in which such notification is received by the market administrator.

Exhibit VIII

AWARD FOR MILK FOR MANUFACTURE INTO CONCENTRATED MILK PRODUCTS

WHEREAS the Negotiating committee for Concentrated Milk Products held a meeting on October 2, 1964, in accordance with a notice under section 13 of Regulation 425 of Revised Regulations of Ontario 1960, and failed to reach agreement on the matters on which it is empowered to adopt or settle by agreement;

AND WHEREAS the matters in dispute were referred to the Board, which arbitrated them on the 20th day of October 1964;

THEREFORE the Board makes the following Award respecting the marketing of milk for manufacture into Concentrated Milk Products under the Ontario Concentrated Milk Producers' Marketing-for-Processing Plan and Regulations:

AWARD

1.-(1) Subject to subsection 2, under this Award all milk received by a processor shall be paid for in accordance with the following schedule of minimum prices for milk testing 3.5 per cent milk-fat delivered to the plants of the processors for the period November 1st to November 4th, 1964 inclusive, and this Award shall remain in force until a new Agreement or Award is in force.

Per 100 lbs.

A. For the manufacture of all concentrated milk products where the milk-fat is used for the manufacture of butter;

where the resazurin test of the milk is grade 1 or 2 2.7445

where the resazurin test of the milk is lower than
grade 2 2.6445

(federal compensatory payments are in addition
where applicable)

B. For the manufacture of other than domestic whole milk powder and evaporated milk case goods; where the resazurin test of the milk is grade 1 or 2 3.00
where the resazurin test of the milk is lower than grade 2 2.90

C. For the manufacture of domestic whole milk roller and spray powder, domestic evaporated and condensed milk packed in cases, and of milk used for all other concentrated milk products not included in categories A, B and D; where the resazurin test of the milk is grade 1 or 2 3.21
where the resazurin test of the milk is lower than grade 2 3.11

D. For the manufacture of concentrated liquid milk 3.70

2. The minimum prices in this Award shall be increased or decreased in direct proportion as the milk-fat content of the milk received by the processor is above or below 3.5 per cent.

3. A processor who manufactures more than one concentrated milk product, or diverts milk for any purpose during any payment period, may blend the prices payable to producers and pay to the producers the blended price for all milk the processor received from the producers during the payment period.

4. Where a processor blends prices under section 3, he shall for each payment period forward to the local board, not later than fifteen days after the close of the payment period, a duplicate copy in Form 27 to Regulation 434 of Revised Regulations of Ontario, 1960.

5. The price to be paid for each payment period by each processor shall be posted at the plant and a copy sent to the Board, the local board, and the Secretary of the local producers' association not later than ten days after the close of the payment period.

Dated at Toronto, Ontario, this 21st day of October, 1964.

THE MILK INDUSTRY BOARD OF ONTARIO.

G. A. McCAGUE, Chairman

A. J. NYHOLT, Secretary

Exhibit IX

SOME VIEWS ON THE METHOD OF IMPLEMENTING A MILK MARKETING PLAN

The following views were expressed to the Committee at public hearings on the dates noted or in briefs as indicated.

Mr. J. W. Pawley—July 30, Toronto

Chairman: “Mr. Pawley, on page one of your submission there is a paragraph I would like to read and then ask you a few questions related to it:

“The Milk Industry Act gives the producers an opportunity to set up a marketing board and to develop a marketing plan. However, the changes that take place under a plan may be so great that it may be difficult to obtain a proper producer, distributor and processor support. It seems to be very important to have the support of the majority to make a plan operate to the very best advantage.”

“First of all, do you feel that it is possible to obtain the substantial producer, distributor, processor support that is necessary to action?”

Mr. Pawley: “I would like to think, Mr. Chairman, that it would be possible. Actually the matter of education—I don’t believe in a lot of these—it may not however and if it isn’t possible, then I would feel that a plan would have to come in without a vote.”

Mr. W. O. Coon—August 26, Brockville

“It would be a producer plan but the government would ask a producer board or appoint a producer board, as was suggested here in our thoughts, to bring a plan into operation.”

Mr. W. T. Langdon—September 12, Guelph

Chairman: “What could Government do for the producers without a substantial measure of interference on this continuing basis?”

Mr. Langdon: "They could advise them of how they could come up with an over-all price-blending plan that would be run by the farmers that would give everyone adequate returns."

Mr. W. Tilden—September 13, Guelph

"Certainly there are people who want to be controlled by the government in marketing, but I think as we go along we may need a little assistance to get it started. We seem to have come to an impasse in the matter of getting an effective marketing plan with all groups involved."

Mr. T. Aiken—November 8, Ottawa

Chairman: "What you have in mind is the imposition of one organization?"

Mr. Aiken: "That is correct."

Chairman: "With the senior people, the representatives elected on a zone or area basis?"

Mr. Aiken: "That is correct."

Mr. J. Revell—November 15, London

"A little further on that same subject: I understand that there was a submission made by the Ontario Farmers' Union, in which they asked and suggested that a trusteeship be set up for the formation of a milk marketing plan, and referring to some of the statements I have already made, I think that's a good idea. I'm thinking a little bit of a humorous statement that was made by a former Minister of Agriculture, when he was referring to world trade, and he said, 'These fellows in industry, they need to be treated the way we treat the calves at the farm. When you teach a calf to drink, you ram your finger in his mouth, and ram his head into the pail, and he will suck your finger until he learns to drink. Then you withdraw your finger, and he'll drink on his own', and I think that there should be something like that for the farmers in Ontario; a trusteeship, perhaps, that could set up a plan that is workable and maintain that trusteeship until it is in a position that it could be handed back to the farm organizations, and they could operate it."

Mr. A. H. Musgrave—November 21, Toronto

"We have had pretty much free enterprise on it and it is our opinion that we need Government to set a plan."

"If Government is going to institute a plan—that is what we ask for—to handle the four types of milk production, then I think the inspection would have to be government-appointed and government-backed."

Mr. E. Farnsworth—December 5, Toronto

“I think our thinking has been, and we haven’t advocated that as yet—the Fluid Milk League have not come out with this suggestion definitely, but I think we are turning more to this suggestion all the time, that possibly the government should set up a board and possibly appoint the members of this board on a temporary basis for a two- or three-year period, something like the Federation recommended. But then at the end of that period, I think these men should be elected from the various segments of the country and I would hope by that time that we would not be fluid-milk producers or concentrated-milk producers—we would be all-milk producers.”

Mr. George R. McLaughlin—Brief #131

“Group action, action that is supported by a majority of the producers, and which has some measure of control over dissenters, seems the only solution to these and other equally important problems. A marketing plan, such as I have outlined in part, instituted by the Minister of Agriculture for a limited period of years, during which producers could decide for or against compulsory marketing on the basis of the Board’s performance, and at the end of which period they would be offered the opportunity to express their opinions by ballot, would, in my opinion, serve to bring a degree of stability and order to the marketing of milk which has not been experienced for many years. Most dairymen, aside from those who are serving on producers’ organizations, are not fully aware of the implications for them as individuals of allowing the present problems to continue unsolved. If some way could be devised to give them this knowledge in accurate and factual form, I feel certain that most producers, excepting only those who, because of geography perhaps, are enjoying the most favourable marketing conditions, would endorse a trial period for the compulsory marketing of milk.”

Toronto Milk Producers’ Association—Brief #141

“We are recommending that you develop a milk marketing plan to the degree that positive action can be taken by the Department of Agriculture. We do not recommend that a plan be voted into being by producers at the present time because over the past two or three years producers have been subjected to all sorts of possibilities in marketing, none of which has materialized. Another plan could add to the confusion. In any case, great difficulty exists in getting the information to the producer and then having the information properly interpreted. Therefore the possibility of a ballot being taken with voters having only partial knowledge is too great to take this chance.”

The Co-operative Union of Ontario—Brief #8

“In view of the urgency for initial action to be taken toward the establishment of the proposed board, it is our suggestion that the membership of the board be appointed by the Department of Agriculture of the Province of Ontario, with the understanding that a producer vote will be held at some future date, for the purpose of electing producer representation on the board at a meeting called for that purpose.”

“In conclusion, Gentlemen, and as an initial step towards the implementation of the points indicated in the foregoing, it is the recommendation of the Co-operative Union of Ontario that an over-all milk marketing board be incorporated by an Act of the Legislature, providing for the appointment by the Minister of Agriculture of Dairy commodity groups and co-operative personnel who will constitute the initial directorate. Thereafter, the board will be elected by the producer representatives at a meeting called for that purpose.”

Leeds County Cheese Producers' Association—Brief #79

“As this is a large step from the four operating organizations who administer each branch on milk usage with many personalities involved, plus the job of educating the individual producer, especially on detail of plan changes, it might be feasible for the Government to appoint a producer board to put a plan in operation and administer same for an experimental period after which a vote of the producer would be necessary.”

Harriston Local of the Ontario Concentrated Milk Producers' Association—Brief #88

“Milk Producer Organizations have not as yet been able to use the facilities of this Act to the extent that they have been able to set up an effective marketing plan. Now it may be necessary for government or governments to more actively participate in this area.”

The Ontario Farmers' Union—Brief #138

“To this end we submit a resolution endorsed by our 12th Annual Convention, October, 1963.

RESOLUTION

Whereas the Ontario Milk Marketing problem is of major concern to the farmers of Ontario, and

Whereas it is now evident that existing milk marketing groups are unable to agree on a type of plan which would provide or bring about a single authority to market all milk, and

Whereas the present Boards have received their agency powers through the Government appointed Milk Industry Board, and

Whereas due to the fact that the present Boards have been allowed by these powers to collect money in excess of that which has been required to carry out the actual marketing process and that this excess revenue has built up to a sizeable amount which could be used to defeat any action which the Government may wish to take towards establishing one milk marketing authority.

Whereas when any steps are taken it is vital that the rights of individuals and of association are protected.

Therefore be it resolved that the Ontario Farmers' Union recommend that the following steps be taken to bring about one marketing authority for milk.

1. That the Government establish a board of at least three members.
2. That the Government enforce a ruling to hold the present marketing agency powers in abeyance.
3. That the newly appointed Government Board be instructed to evolve a Marketing Plan.
4. That complete authority for the direction and marketing of all milk be given the newly appointed Government Board.

And further be it resolved that we, the Ontario Farmers' Union recommend that the three main points in the terms of reference establishing the new Government Milk Marketing Board be,

1. That the members be people who are entirely familiar with all phases of the milk Industry.
2. That complete authority be given to the Board to bring into being an effective system of marketing all milk and that this board be responsible for the welfare of the producer.
3. That when the first two references have been accomplished and a plan is operating satisfactorily it be the Government appointed Milk Marketing Board's responsibility to assist in establishing producer control of the new marketing plan along democratic lines.

The facilities of our organization are available to assist in promoting an education programme towards this objective."

Mr. Glen Cole—Brief #154

"The Marketing Board to be a policy making board, appointed by Government for an adequate time to get the plan operating on a sound basis."

Exhibit X**SIGNIFICANCE OF MILK AS A FOOD IN CANADA**

A statement prepared for the Committee by Dr. George H. Beaton, Professor and Head, Department of Nutrition, School of Hygiene, University of Toronto

Nutritional Significance of Milk

Whole milk has significant quantities of several nutrients including calcium, riboflavin, vitamin A, and protein. Under Canadian conditions, adequate supplies of vitamin A and protein can be obtained from other commonly used foods (e.g. butter, margarine and vegetables for vitamin A; meat, and to a lesser extent, vegetables and cereals, for protein). However, the intakes of calcium and riboflavin recommended in Canada are not likely to be ingested in the absence of milk or milk products.

Canadian studies suggest that the non-dairy foods normally consumed supply 200-300 mg of calcium per day. This represents approximately 1/3, 1/5, 1/6, and 1/2 of the amount of the recommended calcium intakes of young children, older children, adolescents, and adults living in Canada. In the case of riboflavin, non-dairy foods appear to supply 0.8-0.9 mg per day, which represents a large proportion of the intake recommended for children but only about 2/3 of that recommended for adults in Canada. It is important to realize that the intakes of calcium and riboflavin recommended in Canada were reviewed in 1963, and are rather conservative in comparison to intakes recommended in Britain, United States, Holland, Norway, and other comparable nations. However, the recommended calcium intakes for children and adolescents are higher than the "suggested practical allowances" described by the Food and Agriculture Organization—World Health Organization Expert Group in 1961.

It is recognized that over long periods of time, populations, and individuals within a population, can become accustomed to lower intakes of calcium than are recommended in Canada. However, it is also recognized, and well documented by experimental evidence, that individuals who rapidly decrease their intake of calcium will undergo a loss of calcium (demineralization) from bone. The intakes of calcium recommended in Canada are realistic under prevailing Canadian conditions.

It is obvious that under Canadian conditions milk is an important food as a source of calcium and, to a lesser extent, as a source of riboflavin. Considering the probable intake of calcium from non-dairy food sources, intakes of about 1, 1½, and ½ pint of milk per day have been suggested for children, adolescents, and adults to ensure that calcium will be supplied in the recommended amounts (see Table A).

Alternate Sources of Nutrients in Milk

As already noted, the protein and vitamin A contained in milk is readily available from other foods commonly used in Canada. The only nutrients that need be considered are calcium and riboflavin. In this connection, it is important to realize that when the butterfat is removed from milk in the production of skim milk, the vitamin A is also removed but the calcium, riboflavin, and protein remain. In the production of cheese (except cottage cheese) most of the calcium is retained in the cheese as is also the protein; about one half of the riboflavin is retained. Butter contains negligible amounts of calcium, riboflavin, and protein although it does contain the vitamin A of the original milk. Thus, in terms of assuring an intake of calcium and riboflavin, it is immaterial whether whole milk or skim milk is consumed. Similarly it is recognized that other dairy foods containing the milk solids (e.g. cheese), consumed in appropriate quantities, are suitable substitutes for fluid milk.

Aside from the dairy products, there are few if any individual foods or food groups used in Canada which could be considered to be rich in calcium. In several countries where milk products are not available, other sources of calcium do become significant. Thus in certain areas the consumption of whole fish provides calcium derived from the bones; the use of bone meal has provided a source of calcium in other areas.

A few foods, available in Canada, are rich sources of riboflavin. However, these foods (such as liver, yeast, and collard) are not commonly used.

It would seem likely that in the absence of milk products, ingestion of the recommended intakes of calcium and riboflavin could only be assured by the use of pharmaceutical preparations or a compulsory programme of carefully planned food enrichment. From the public health standpoint, it is doubtful whether either of these measures would be practical.

Significance of Cholesterol and Fat in Milk

A great deal of attention has been directed toward the possible role of diet in heart disease. Attention has centred on the intake of fat (and more particularly animal fat) and the intake of cholesterol.

The effect of modifications of diet, on the prevention or delay of onset of heart disease in humans, is currently under investigation. As yet, there is little agreement between authors regarding the type of dietary modification that might be desirable in the human although most agree that excessive intake of fat is undesirable in view of a possible role in heart disease and effect on calorie intake and hence on obesity.

One and one half pints of milk, the amount suggested for the adolescent, would contain about 70 mg of cholesterol and 21 mg of fat, assuming whole milk were used. This represents about 8-10 per cent of the probable cholesterol intake and perhaps 15-20 per cent of the fat intake of Canadians. The intake of milk suggested for adults ($\frac{1}{2}$ pint) would supply only $\frac{1}{3}$ of these amounts of cholesterol and fat. Removal of that quantity of milk from the diet with no other dietary change would have a negligible effect on the intake of cholesterol and a relatively minor effect on the intake of fat; it would have a more significant effect on the intake of animal fat.

A recommendation for the restriction of milk intake to control the intake of cholesterol and fat would only be meaningful as a *part* of a broad recommendation of dietary changes to restrict the intakes of these components from *all* sources. Furthermore, if at some time in the future, it is deemed advisable to restrict the intake of animal fat and/or of cholesterol, it will not be necessary to restrict the consumption of milk. Substitution of skim milk for whole milk eliminates nearly all of the fat and cholesterol in this food.

Milk In Infant Feeding

The foregoing remarks have been directed toward the use of milk and milk products by children, adolescents, and adults. While milk substitutes based on vegetable products have been designed for use by infants allergic to the protein of milk, such substitutes are more expensive and are of no apparent advantage to the normal infant. A large number of modified milks have been made available by commercial firms. These are not milk substitutes, as they make use of whole milk, skimmed milk, or dried milk powder as the basic ingredient. The value of milk in some form, breast or cow's, modified or unmodified, for infant feeding has never been seriously questioned.

Validity of Pricing Milk on the Basis of Butterfat Content

As already pointed out, the nutrients for which milk is recommended in Canada are associated with the milk solids and are equally abundant in skim and whole milk. Therefore, there is no *nutritional* basis for the pricing of fluid milk in relation to butterfat content.

Table A

Sources of Calcium and Riboflavin

Age Group	Recommended Nutrient Intake ¹	Apparent Intake from Non-dairy Foods ²		Suggested Intake of Milk	
		Calcium (mg/day)	Riboflavin (mg/day)	Volume per day	Calcium (mg)
Children:					
1-6 years	700	0.6 - 0.9		1 pint	700
7-9 years	1000	1.1	200 - 300	0.8 - 0.9	1.0
Adolescents:					
10-17 years	1200	1.2 - 1.9		1½ pint	1050
18-19 years	900	1.2 - 1.9			1.5
Adults: ⁴					
	500	1.1 - 1.5		½ pint	350
					0.5

¹ from: Canadian Dietary Standard, 1963.² Based on national food statistics (apparent disappearance of food into the consumer market) and a survey of teen-age eating habits; the data may not apply to children.³ from: Table of Food Values Recommended for Use in Canada.⁴ Not including pregnant or lactating women.

Exhibit XI**INTERPLANT MILK TRANSPORTATION COSTS**

**Agricultural Experiment Station
University of Minnesota**

Station Bulletin 465

June 1963

Summary and Conclusions

The objectives of this study centered around estimating the costs of hauling milk between receiving stations or local creameries and central processing plants. To accomplish these objectives, interplant transportation costs were broken into truck costs and labor costs. Truck costs were considered as related to miles driven, hauling capacity, weight efficiency, and fuel type. Labor costs were considered as related to miles driven, volume of milk hauled, number of loading stops, and types of loading and unloading equipment.

Statistical analyses were then made of truck records of 10 large dairy plants and a time-and-motion study of 76 truck drivers. Estimates were then made of truck costs and labor costs. These, in turn, were summed to obtain estimates of total interplant transportation costs.

Truck costs were estimated for three levels of mileage utilization—3,000, 5,000, and 7,000 miles per month—and trucks capable of hauling loads of four different sizes—13,000 to 13,500, 18,000 to 21,000, 35,400 to 38,700, and 41,300 to 43,000 pounds. These estimates were expressed as total truck costs per month, per mile, per cwt. and per cwt.-mile. From these different expressions of truck costs, especially those for 5,000 and 7,000 miles per month, one economic relationship was evident. *Relatively large truck units cost much less to operate on a capacity basis for a given level of mileage utilization than small ones.*

These economies can be illustrated for different sizes of truck units driven 5,000 miles per month over a 50-mile route. Under these conditions the smallest truck units, 13,000 to 13,500 pounds capacity,

had truck costs of 3.7 cents per cwt. and the largest ones, 41,300 to 43,000 pounds, costs of 2.6 cents where 90-percent capacity was utilized.

Labor costs were estimated on a load basis from estimates of the time required for each variable and fixed hauling task using a wage rate of \$1.80 per hour. Again, significant economies were associated with hauling capacity for each set of hauling conditions analyzed: (1) route lengths of 25, 50, 75, and 100 miles, (2) one, two, and three loading stops, (3) 2-inch loading lines, (4) 3-inch unloading lines, and (5) a 90-percent level of capacity utilization. *Labor costs per cwt. were considerably less for relatively large trucks than small ones.*

The significance of this relationship is seen immediately when studying the amount of time used on a 50-mile route where one loading stop was made. Under these conditions, drivers operating the smallest trucks used 133 minutes per load of milk while drivers operating the largest units used 171 minutes. Pumping time really accounted for the 38 minute difference. It took the same time to drive the small trucks between stops as the large ones and to perform all tasks associated with getting the truck units ready for loading and unloading.

When labor and truck costs were summed to obtain total interplant transportation costs, the labor relationship magnified the economies associated with truck size. Again, these economies can be illustrated for the same set of hauling conditions used for truck and labor costs. Total transportation costs per cwt. in this case were 7.1 cents for truck units hauling between 13,000 and 13,500 pounds and 3.9 cents for units hauling between 41,300 and 43,000 pounds. Greater size economies were associated with total transportation costs than with truck costs.

An analysis of transportation costs was also made for a period of spring road restrictions when trucks are limited to 8,000 pounds per axle. This analysis showed that planning of the truck fleet was especially important where many local plants were located on posted roads. Minnesota road restrictions generally preclude the use of semi-trucks with just one driving axle. Estimates of transportation cost per cwt. were much higher also for various types of route conditions in this period. Costs of trucks operating on restricted roads averaged 2.6 times more than normal.

Results of this study show that relatively large truck units can haul milk between receiving stations or local creameries and central processing plants for significantly less than small ones.

Exhibit XII

AN ASSESSMENT OF THE INFRA-RED MILK ANALYSER

By Professor D. A. Biggs, Department of Dairy Science,
University of Guelph

The most striking feature of the Infra-Red Milk Analyser is its ability to complete a four-component (fat, protein, lactose, and s.n.f.) analysis of milk in less than one minute. This reduces the cost of multiple-component testing to a fraction of the cost of the Babcock fat test. The projected costs of IRMA analysis of milk are shown in the following table:

Costs per Sample (in cents)

Amortization Period	Number of Components Tested			
	4	3	2	1
10 years	5.4	4.4	3.4	2.5
8 years	5.7	4.7	3.6	2.6
5 years	6.5	5.3	4.1	3.0
3 years	7.9	6.5	5.0	3.6

Note: (1) Interest calculated at 6% per annum, compounded annually, and assuming no salvage value at end of period.

(2) Salary for one technician at \$2.00 per hour. Rate of four-component analysis estimated at 400 per eight-hour day.

The United States Department of Agriculture has recently reported that the cost of a single Babcock fat test, exclusive of sampling and transportation costs, but including laboratory costs, is between 27 and 46 cents, depending upon the size of the laboratory in which the tests are carried out. Thus it can be seen that the use of IRMA will make possible a very substantial reduction in the cost of milk analysis. More important, it now becomes practical to test for any of the major milk components, if this should be required.

A second important feature of the IRMA method is that one can apply a basic principle of automation to the control of any number of instruments. Optical filter standards in each instrument can be used to obtain a check on the accuracy of its calibration at any time. This information can be fed back to a main Central Laboratory, thus

furnishing proof of the authenticity of results at all laboratories. Also, since it is possible to obtain devices which will automatically print the analytical results on a paper tape, it will be feasible to obtain calibration data and analytical results on the same tape. Thus the proof of authenticity of results can become a part of routine analysis.

The calibration system which is suggested for initial calibration of IRMA instruments is ideal for control purposes. It is only necessary to calibrate one instrument by carrying out comparative analyses by IRMA and accepted chemical methods. Standard solutions, prepared from pure chemicals, can be used to transfer the calibration of one instrument to any number of instruments. Thus all instruments in a complex may be made to respond identically to any given sample of milk. An independent check on the calibration of all instruments can be obtained by sending out standard solutions with compositions which are known only at the main Central Laboratory.

The accuracies and provisions obtained to date with the IRMA instrument at Guelph have been comparable to those which can be obtained within a single laboratory when using the chemical methods. Since the homogenization efficiency of the homogenizer on the instrument at Guelph has not been entirely satisfactory, and since this factor has a very definite effect upon results, it is estimated that the use of a more efficient homogenizer will bring about an improvement in both precision and accuracy. Considering the over-all accuracy of results from a large number of laboratories, I would estimate that the infra-red methods should be superior to the chemical methods, principally because the infra-red methods lend themselves readily to a workable system of inter-laboratory analysis control. Very few estimates of deviations in chemical results between laboratories are available, but when these have been measured the results have indicated that between-laboratory deviations are considerably higher than those within any single laboratory. For example, a single milk powder was distributed to 45 different laboratories, including ours, during 1963, and the results of an official Kjeldahl test for protein varied from 27.18 per cent to 39.99 per cent. The deviations between results within a single laboratory would not exceed 1.5 per cent. It is obvious that inter-laboratory control, if properly used, will lead to much better uniformity in test results.

IRMA instruments have separate calibration controls for each component, and these may be adjusted very easily when calibration checks indicate deviations from the required calibration. This is a desirable feature, but it is also one which could be misused. For this reason it would be logical to restrict the control of these instruments

to those who could not gain by unethical adjustment of the calibration controls.

The manufacturers of the IRMA instrument, Sir Howard Grubb Parsons of Newcastle-upon-Tyne, England, have been most co-operative in supplying instruments for check testing, and have indicated their willingness to supply service personnel whenever they are needed. They have also indicated that we will be the first to receive the more efficient homogenizer which they are planning to use on future instruments. I mention these facts because it will be important to have assurance of adequate servicing if IRMA instruments are installed in Central Laboratories.

USES FOR INFRA-RED MILK ANALYSERS IN ONTARIO

Logically, Infra-Red Milk Analysers could be used to advantage in testing milk for the determination of the price to be paid to the producer, and in testing the milk of individual cows for selective breeding services such as the R.O.P. and the D.H.I.A. As the most efficient and economical use of IRMA instruments would be in a system of Central Laboratories, and as the setting up of such a system would require the expenditure of a very considerable amount of money, it is also logical to consider what tests should be performed and whether or not the industry would achieve any real measure of progress by going ahead with such a programme.

Besides decreasing the cost of testing, the most noteworthy feature of the IRMA instrument is that it makes possible a rapid and inexpensive test for milk protein. If any lasting gain is achieved by the use of IRMA, I would say that it would be in increasing the production of milk protein, both by culling poor protein-producing cows, and by selective breeding for increased protein production. Since protein is a major growth factor, its importance to a rapidly expanding population exceeds that of either fat or carbohydrate. Of these three major food ingredients, protein is the most costly to produce, and the world supply of it is not adequate for our present population. Milk protein is one of our least expensive sources of major food proteins, and yet we have made no attempt to increase production of it.

If the production of milk protein is to be increased, selective breeding services must be greatly expanded. I think I am approximately correct in saying that only about 8 per cent of the dairy cows in Canada are in the combined R.O.P. and D.H.I.A. services. One might logically ask why this percentage is so small. I think part of the answer is that the majority of farmers do not believe that they can improve their position by the use of these services, and they must have reasons for this opinion. In attempting to interpret the attitudes of farmers, I would say that before embarking

on a selective breeding programme, they would have to *know* that gains in production would bring gains in income, and that the production of a high-quality product would be rewarded with a high-quality price. Our present methods of evaluating and paying for milk, in my opinion, do not lead farmers to believe that these gains would necessarily follow an increase in quality and production.

In our present pricing system, the sampling and testing of milk is in the hands of those who purchase it, and the system of check testing these samples is not adequate for the purpose of curbing unethical adjustment of samples or results. The check testing system is a needless duplication of effort, since a buyer could adjust tests merely by judicious tampering with the samples (e.g., by adding water or removing fat). Without accusing anyone of resorting to such unethical practices, the opportunity to do so is there, and the producers know this. I am sure that a majority of producers would claim that they are not receiving a fair test, even though this may not be so. With a pricing system which assumes all milks equal in composition except for variations in fat content, many farmers do not believe that an increase in fat production in their herd will bring them a higher test. In my opinion this situation impedes progress in selective breeding, and it will prevail until both the sampling and testing of milk become the responsibility of a neutral organization which can have no possible financial interest in the magnitude of test results.

A second disastrous situation has been brought about by the quota system. Although this system may have served a useful purpose in the initial development of the dairy industry, it has become a most controversial subject and is the source of a great deal of friction, both between individuals and between organizations. A quota is virtually a licence to produce high-quality milk for a high-priced market, and it can be bought and sold like any other commodity. It is my belief that the price paid for milk should be based on quality and composition only, with the provision that producers must maintain their premises in a proper condition for the production of milk. I think all producers of high-quality milk should receive the same percentage of the higher price (i.e. the percentage of this milk which is utilized in the fluid market). In my opinion, the quota system impedes progress because it does not stimulate non-quota-holders to improve quality and it does not stimulate quota-holders to be careful about maintaining quality. Farmers who do not have a quota would be more willing to improve the quality of their herds and of the milk produced, if they knew that a fair portion of their high-quality product would bring a higher price. Abolition of this system would, I am sure, result in an increased interest in selective breeding programmes.

A third unfortunate situation results from the fact that the formula for calculating price does not provide a good estimate of the value of the milk, either from a nutritional or manufacturing point of view. Variations in both fat and protein affect its value, whereas only the variation in fat is recognized. Producer organizations which specialize in high-protein milks have advertised this fact and have been successful in promoting its sale to the public. In so doing I would imagine that they have increased the demand by distributors for their milk, and have thus been able to increase quotas relative to those for lower-protein milks. This has led to considerable friction within the industry, and in addition it has enabled distributors to sell a high-protein milk containing 2 per cent fat at a price below that of standard milk. I would like to see a pricing system based on a formula of the type $(xF + yP)$ per cwt., where F and P are the percentages of fat and protein respectively. In my opinion the high-protein milks should receive a higher price, and the public in turn should pay more for them. In addition to providing an excellent stimulus for selective breeding aimed at increased production of protein, such a formula would remove the motive for watering milk that is the result of the present price structure.

In summary, I believe that IRMA instruments could be used advantageously in testing milk for the determination of the price paid to the producer, but I would also say that the maximum advantage will be realized only if both fat and protein are used in the price formula, and if the sampling and testing of milk becomes the responsibility of an organization which does not have a financial interest in the magnitude of test results. In addition I think it would be advantageous to abolish the quota system, and to base payment only on quality and composition. I think IRMA instruments could be used to extreme advantage in expanding R.O.P. and D.H.I.A. services, especially if the pricing and testing systems are changed as indicated.

With regard to R.O.P. and D.H.I.A. services, I think that they must offer both farmer sampling and official sampling services. Many farmers do not need official sampling initially, and the farmer sampling service would be much less expensive.

Regarding the use of Central Laboratories, I feel that a main Central Laboratory should have complete control over sampling procedures, in the training of persons engaged in sampling, and in the control of testing at all subsidiary Central Laboratories.

Exhibit XIII

THE BASIS OF PAYMENT FOR MILK

(a) Following is an extract from a 1963 paper dealing with the increasing demand to change the basis of milk pricing.

WHAT PRICE MILK?

By A. Reinhart and J. M. Nesbitt, Department of Dairy Science,
University of Manitoba

Because of the great variations in the chemical composition of herd milk, its pricing has always been a problem. With the development of different methods of determining certain constituents (especially protein), more attention has been paid to this matter. Part of the attention is due to efforts to de-emphasize the importance of fat. However, before changes are made to a protein, solids-not-fat or other basis, some consideration should be given to the fundamental aspects of milk pricing.

The purpose of this paper is to discuss some theoretical material relevant to methods of payment for milk and to compare methods for payment. It is not intended to provide the answer to milk pricing problems, but rather to stimulate thought about these problems. The material is presented from the viewpoint of a farmer and we are not concerned with economic implications, nor the level of base prices (not that either of these are unimportant), but rather with ensuring that a fair return is paid to each farmer based on the food value of the milk he ships.

It is usually assumed that we purchase milk as a food. This assumption requires qualification. If we do in fact purchase milk as a food, then we should be interested in getting milk with the highest nutritional value, i.e. milk with a high fat content (and other constituents, especially vitamin A, associated with the fat). Such is not now the case, as indicated by the trends to skim milk and low fat milk. Perhaps these trends are not based on sound economics or sound reasoning. One of the reasons for the trend to low fat products is the fear of heart disease—a fear still unfounded in fact. Should

this fear cause us to feed our children 2 per cent milk when they need all the energy and vitamins they can get from whole milk? Another reason for the trend to low fat products is an economic one. They are cheaper. This again may be false economy, because the energy and vitamins obtained from the whole milk may be cheaper and probably more palatable to the child than those obtained from other sources. Regardless of the reasons, the trend to low fat products, though it may be stemmed, still exists and must be considered in any discussion of milk pricing.

Variations in the Composition of Milk

If we purchase milk as a food for its nutritional value, the basis of payment should take into account all the constituents of milk, which contribute to this nutritional value. Milk as a food is a source of:

1. calories (energy)—fat, lactose, protein;
2. body building materials—protein, minerals; and
3. growth factors—vitamins A, B₁, B₂, B₆, B₁₂, C, D, E; niacin, biotin, choline, pantothenic acid, folic acid, and others.

All these constituents are nutritionally important and should be considered in any basis of payment. The amounts of these ingredients in milk are variable depending upon the breed of cows, the season of the year, the stage of lactation and on many other factors, as numerous investigations, including our own study—"The Composition of Milk in Manitoba"—have shown.

Conclusions

From the comparison of different methods for the pricing of milk, it can be concluded:

1. The best method for the pricing of milk is the fat + protein + lactose method, if a suitable and economical method is developed for the determination of these constituents in milk.
2. The second best method for pricing milk is the fat + solids-not-fat method, again providing that a suitable, accurate and economical method is developed for the determination of the solids-not-fat content of milk.
3. Until the methods indicated above have been developed, the caloric differential method (fat + 1/58 of base) is the fairest method for milk pricing. It is simple, economical, rapid, and gives (for milk of normal composition) as fair prices as the fat + protein + lactose and fat + solids-not-fat methods give.

The other methods discussed above give more variable and thus less fair milk prices. The decision as to what method will be used will depend on local conditions and must be decided by local authorities.

(b) The importance of milk as a beverage rather than as a food should not be overlooked. The following summary of one research project dated November 1962 can be related to bases of payment for milk.

CONSUMER PREFERENCE AND ACCEPTANCE FOR MILK VARYING IN FAT AND SOLIDS-NOT-FAT

By J. S. Hillman, J. W. Stull and R. C. Angus,
The University of Arizona

Summary

In recent years new forms of dairy products have resulted from attempts by the dairy industry to meet changing demand patterns of consumers. These new products have begun to alter and may alter further certain production-supply relationships in the dairy industry. The Departments of Agricultural Economics and Dairy Science, through funds from the American Dairy Association, conducted extensive consumer and market tests to evaluate the effects of variation in milk composition on preference and acceptance of a variety of fluid-milk beverages. Some results of these tests are:

1. Consumer acceptance observations were made on milk beverages of varying fat and solids-not-fat (SNF) content. Threshold taste tests indicated that many people can differentiate between milk beverages with variations in fat and SNF of 0.5 and 1.0%, respectively.
2. The addition of 1.0% SNF to whole, low-fat or non-fat milk beverages caused a highly significant increase in consumer acceptance of each type of beverage tested.
3. A slight but significant preference was shown for a low-fat beverage with 1.0% added SNF when compared with whole milk of normal composition.
4. Equal preference was indicated for a low-fat beverage without added SNF when compared with a non-fat product fortified with 1.0% SNF.

5. A slight but significantly greater preference was evident for a regular whole milk with 1.0% added SNF, when compared to a higher fat (4.0%) product without added SNF.

6. A substantial market test of a milk containing 3.5% fat standardized to 9.5% SNF was introduced on the market in Tucson, Arizona, for a period of six weeks. In general, the results of the market test reinforced the taste and preference tests. Over three-fourths of the consumers indicated that they would continue to purchase this milk beverage if it were regularly available. Respondents to a questionnaire expressed general willingness to pay a two-cent premium per half-gallon for this milk.

(c) Publications dealing with the many bases of payment for milk include:

Milk Composition in the United Kingdom: Report of an Inter-departmental Committee (The Cook Committee), London: H.M.S.O., 1960.

Multiple Component Pricing of Milk, Bulletin 536, Experiment Station, College of Agriculture, University of Massachusetts, April 1963.

O. D. Forker, *The California Solids-Not-Fat Pricing Plan* (Agricultural Extension Service, University of California, Berkeley, California, April 26, 1962).

“Milk Checks Paid on Protein Basis”, *Guernsey Breeders’ Journal*, CX, 3 (August 7, 1962), p. 235.

Kenneth A. Hyde, *Some Observations of Testing Milk for Protein in the Netherlands* (a report from Centraal Laboratorium, Hoornmar, Netherlands, January 1961).

Nutritional Significance and Safety of Milk and Milk Products in the National Diet (Food and Nutrition Board, National Research Council, National Academy of Sciences, Washington, D.C., 1962).

Exhibit XIV**FAT TESTS AT DAIRY PLANT AND BY D.H.I.A.**

By Professor A. N. Myhr, Department of Dairy Science,
University of Guelph

It is quite illogical to compare the results of fat tests obtained by the D.H.I.A. recorder and the dairy plant. Some of the reasons why the D.H.I.A. test may not agree with the fat test at the dairy plant are as follows:

1. The plant results for the month are obtained by testing composite samples made up from every shipment of milk throughout the test period whereas the herd recorder bases his monthly test on the morning and evening milkings of one day.

Cranfield found that in a herd of 30 to 35 cows the mixed milk may easily vary one per cent in its fat content from one day to the next. Presumably, on this point, one could expect a plus or minus variation in the two tests but there is some tendency on the part of producers to voice cries of injustice only when the plant tests are below those shown by the D.H.I.A. recorder.

2. The period of time over which a given average fat test would apply is seldom the same for the two testing agencies.
3. Producers on the D.H.I.A. testing programme are under obligation to show improvements in the production of their cows in order to be retained on the programme. Further, the higher the record of production they can show for their cows, the greater the sales value as dairy cows. The producer's awareness of these factors tends to make him extremely conscientious in his efforts to extract every last drop of milk out of his cows on the day on which the D.H.I.A. recorder is performing his per-cow weighings of milk and fat testing. It is very common practice for the farmer to perform hand stripping after the milking machine has been removed to make certain that all the milk has been harvested. Routinely he would not likely consider that the extra labour and

time involved in such thorough and complete milking would pay him and may or may not even bother to machine strip the cows.

The differences in these two approaches to cow milking does have a considerable bearing on the fat test. The figures by MacEwan and Graham, University of Saskatchewan (probably from a Holstein cow) illustrate this fact:

<u>Fat Content</u>	
	<u>%</u>
First stream	1.1
First quart	1.4
Second quart	2.0
Third quart	3.1
Fourth quart	4.0
Strippings	7.6
Composite	3.26

Average 2.8%—strippings not included

Judkins at Massachusetts showed similar results in a class exercise with one cow (Breed not reported) :

<u>Stage of Milking</u>	<u>% Fat</u>
First streams	1.6
25% drawn	3.25
75% drawn	5.00
Strippings	8.3

Judkins reported that strippings from a Jersey cow frequently test as high as 10 to 12 per cent.

4. The milk which is sent to the dairy plant is seldom the same milk which is tested by the D.H.I.A. official. The removal of top milk for household use, spillage, calf feeding, or other losses may be important factors causing a lower plant test.
5. Fat adhering to the shoulders and lid of the can at the time the milk is dumped at the plant would lower the plant test. Spillage of top milk during dumping operation could also be a factor here.

Anyone who has watched can dumping in operation realizes that a considerable amount of milk is lost when cans are emptied at the weigh scale. It has been estimated that this loss may vary from a half pound to a pound and a half per can depending upon the can dumping procedure.

These are some of the major factors which could have a significant bearing on the lack of agreement which frequently occurs in the results of fat tests and amount of milk as recorded by the dairy plant and the D.H.I.A. tester.

Exhibit XV**EXCERPT FROM THE REPORT OF THE DIRECTOR OF
INVESTIGATION AND RESEARCH,
COMBINES INVESTIGATION ACT,
FOR THE YEAR ENDED MARCH 31, 1961**

In October 1959, it was reported in the press that an executive of one of the dairies in Toronto had stated that the market was disorganized and the dairies had agreed, for a 90-day period, to refuse to supply retailers who undersold the fixed price of 23c per quart for milk. Subsequently, a complaint was received to the effect that a combine existed amongst the suppliers of milk in Toronto and that as a result the price of milk had been enhanced.

The Milk Industry Act of Ontario¹⁹ provides a method of determining the prices to be paid to producers by distributors for fluid milk. It does not, however, provide for the fixing of minimum prices of fluid milk products sold by wholesalers or retailers, although the Milk Board may, after a public hearing, prescribe the maximum prices at which fluid milk products may be sold by wholesalers to retailers in any market.

Information obtained in the industry indicated that during the past two years milk had been sold from time to time at very low prices by retailers in Toronto with the effect of disrupting the market as far as the distributors were concerned by diverting sales from home deliveries to retail stores and creating pressure upon the distributors for uneconomical discounts. In part, the situation had been aggravated by the selling activities of a new type of outlet in the Toronto area and the introduction into the Toronto market of the three-quart jug. One of the dairies explained that the practice of buying these jugs on the week-end had reduced the volume of home deliveries by the distributors without reducing their costs.

This competitive situation, together with an increase granted to the milk producers in the late summer or fall of 1959, was apparently of some concern to the Dairy Commissioner for Ontario. The

Toronto milk distributors did not feel that, with increasing costs and stiffer competition, they were in a position to pay the higher prices to the producers. The evidence indicated that on September 21 and September 23, 1959, meetings with the distributors were convened by the Dairy Commissioner. An examination of what took place at these meetings indicated that efforts were made to have the industry discontinue all discounts and rebates at the wholesale level and to prevail upon all retail outlets to maintain minimum retail selling prices.

At the time of the inquiry it was obvious that the Toronto distributors had not discontinued the granting of discounts and rebates. While some reduction may have taken place in the number of accounts to whom discounts or rebates were granted, and in the rates of such discounts or rebates, they were still being granted by most of the dairies. The discounts and rebates being offered varied from dairy to dairy and no pattern indicative of agreement in this respect was discernible. It would appear that these discounts and rebates had arisen from competitive situations and had resulted in a wide range of prices at the wholesale level. Also, the evidence did not disclose any price-fixing activities on the part of the milk distributors in respect of home deliveries. Home delivery prices appear to have been relatively stable, which may have been due, in part, to the influence of the above meetings. Nevertheless, milk consumers in Toronto do appear to have alternative sources of supply in the retail stores where the prices are competitive.

In the light of the foregoing, it was considered that the facts were not such as to warrant an allegation of price fixing and it was decided to discontinue the inquiry.

Since no evidence had been brought before the Restrictive Trade Practices Commission, the concurrence of the Commission was not required in the discontinuance. As required by section 14 (2) of the Act, the discontinuance was reported to the Minister on August 26, 1960.

¹⁹ R.S.O., 1960, c. 239, formerly S.O., 1957, c. 70.

Exhibit XVI**HAZARD FROM STRONTIUM-90 IN FALLOUT**

By
W. E. Grummitt

Strontium-90, cesium-137 and iodine-131 are potentially hazardous radioisotopes in fallout. Iodine-131 decays quickly and is present only during periods of weapons testing; cesium-137 can be fixed chemically in the soil so that the quantity in plants and animals is dependent on direct fallout. Strontium-90, on the other hand, is readily taken up from soil and is found in plant and animal tissue long after weapons tests have taken place.

Strontium, which is chemically very similar to calcium, is transferred to man via his food. In the case of the food chain involving milk, or other animal product, every step in the chain tends to reduce the amount of strontium-90 which is eventually ingested by man. Thus the cow secretes in its milk only a small fraction of the strontium-90 it consumes from grass. The placental barrier provides the unborn child with substantial protection against strontium and the mammary glands of the mother further discriminate against strontium and tend to protect the breast-fed child.

Methods have been developed for removing strontium-90 from liquid milk, but these are not readily applicable to other foods. In Canada, about two-thirds of the strontium-90 in the average diet is contributed by milk and milk products. The remaining one-third is derived from solid food, so complete removal of strontium-90 from the diet is not feasible. It is questionable whether a scheme based on milk alone would be of much value.

Numerous committees* have studied the problem of uptake and are in substantial agreement concerning the amount of strontium-90 in food, and the predicted levels in new bone (i.e. children's bone or bone recently deposited in adults) as a result of the ingestion of food. Calculations of the radiation dose to new bone have also been done with general unanimity. It is the assessment of biological consequences that becomes difficult to predict accurately.

Three courses are open to arrive at an evaluation of the biological risk. The dose can be related to that from natural background; it can be compared with a previously arbitrarily set level such as that of the ICRP**; or it can be calculated in terms of numbers of affected individuals.

The first and second methods show that fallout doses are appreciably smaller than those from natural background (about 10%), or those set as maxima for industrial workers (less than 1%). The third method has generally been avoided due to lack of knowledge of the risks of radiation injury and lack of information on the linearity of the dose-effect relationship. UNSCEAR (1964) has calculated the incidence of leukemia per rad and the dose to new bone from weapons tests to date. Using these figures one arrives at an incidence of less than two cases per year for the whole population of Canada (19 million), as a result of tests conducted prior to 1965. Similarly one can calculate the probable incidence of bone sarcoma (tumor) from data given in the same report. Again the probable incidence is less than one case per year in Canada. If there is a threshold dose below which the risk is negligible, the incidence in both cases may very well be zero.

Some insight into the magnitude of the risks from fallout can be obtained by a comparison with the risk of accidental death in Canada. This amounts to some ten thousand fatalities per year, in the total population, a not inconsequential number when related to risks of radiation injury.

- * United Nations Scientific Committee on the Effects of Atomic Radiations. Report to the General Assembly No. 14 (A15814) New York, 1964.
- Food and Agriculture Organization of the United Nations; Dietary Levels of Strontium-90 and Cesium-137; Rome, 1962.
- Medical Research Council; The Hazards to Man of Nuclear and Allied Radiations; London, 1960.
- National Academy of Sciences, National Research Council; Radionuclides in Foods; Washington, 1962.

** International Committee on Radiological Protection; Recommendations of the ICRP; Publication No. 6, 1964.

Exhibit XVII

DISTRIBUTION OF
MILK COWS IN SOUTHERN ONTARIO
1963

Each full dot represents 1000 cows

NORTHERN

ONTARIO

0 50
SCALE IN MILES

Exhibit XVIII
DISTRIBUTION OF
FLUID MILK SHIPPERS TO MAJOR MARKETS
1963

Each full dot represents 10 shippers

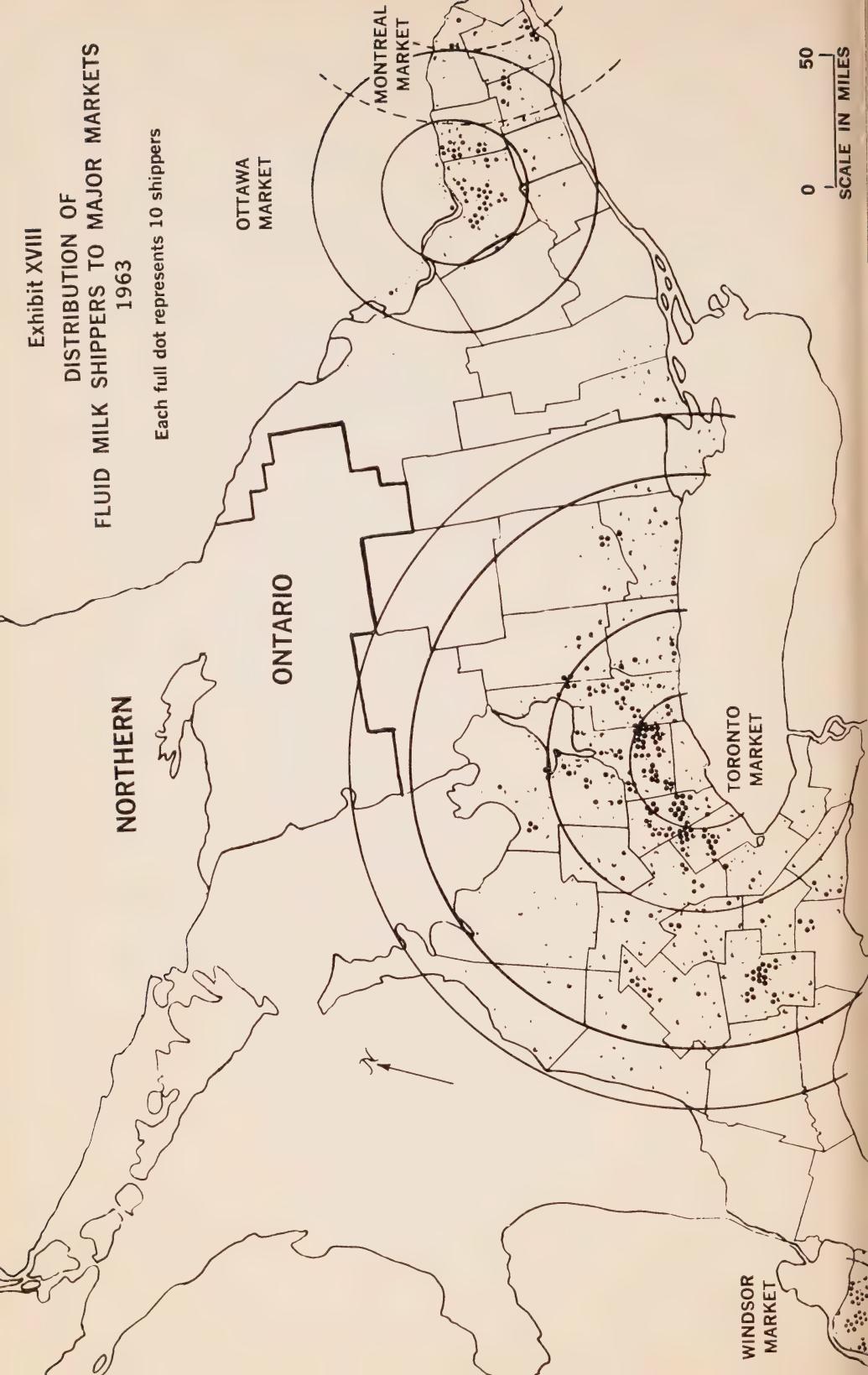


Exhibit XIX

DISTRIBUTION OF FLUID MILK PLANTS
1964

NORTHERN

ONTARIO

50

0
SCALE IN MILES



NORTHERN

ONTARIO

Exhibit XX
DISTRIBUTION OF CHEESE FACTORIES
1964

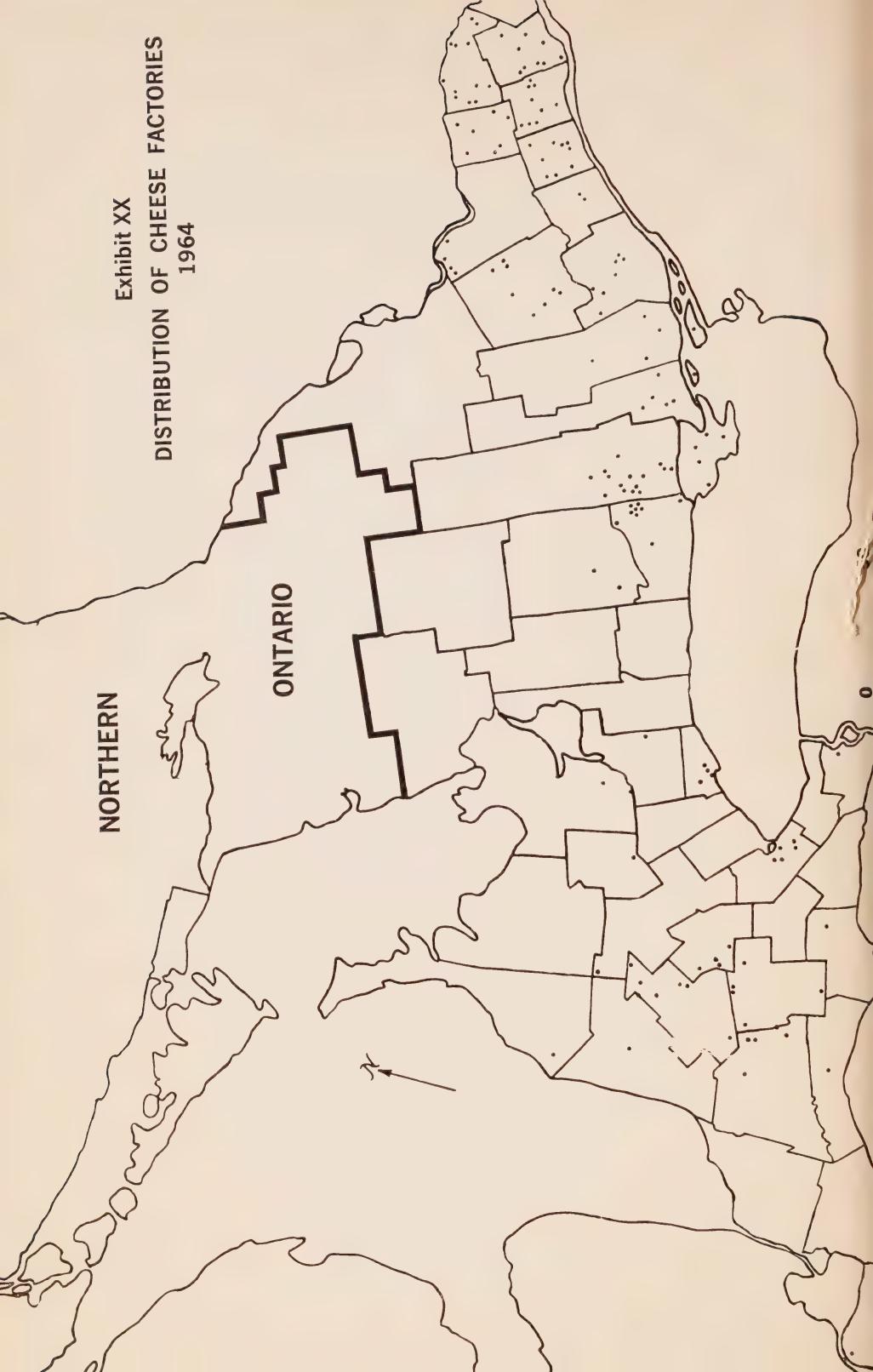


Exhibit XXI
DISTRIBUTION OF CREAMERIES
1964

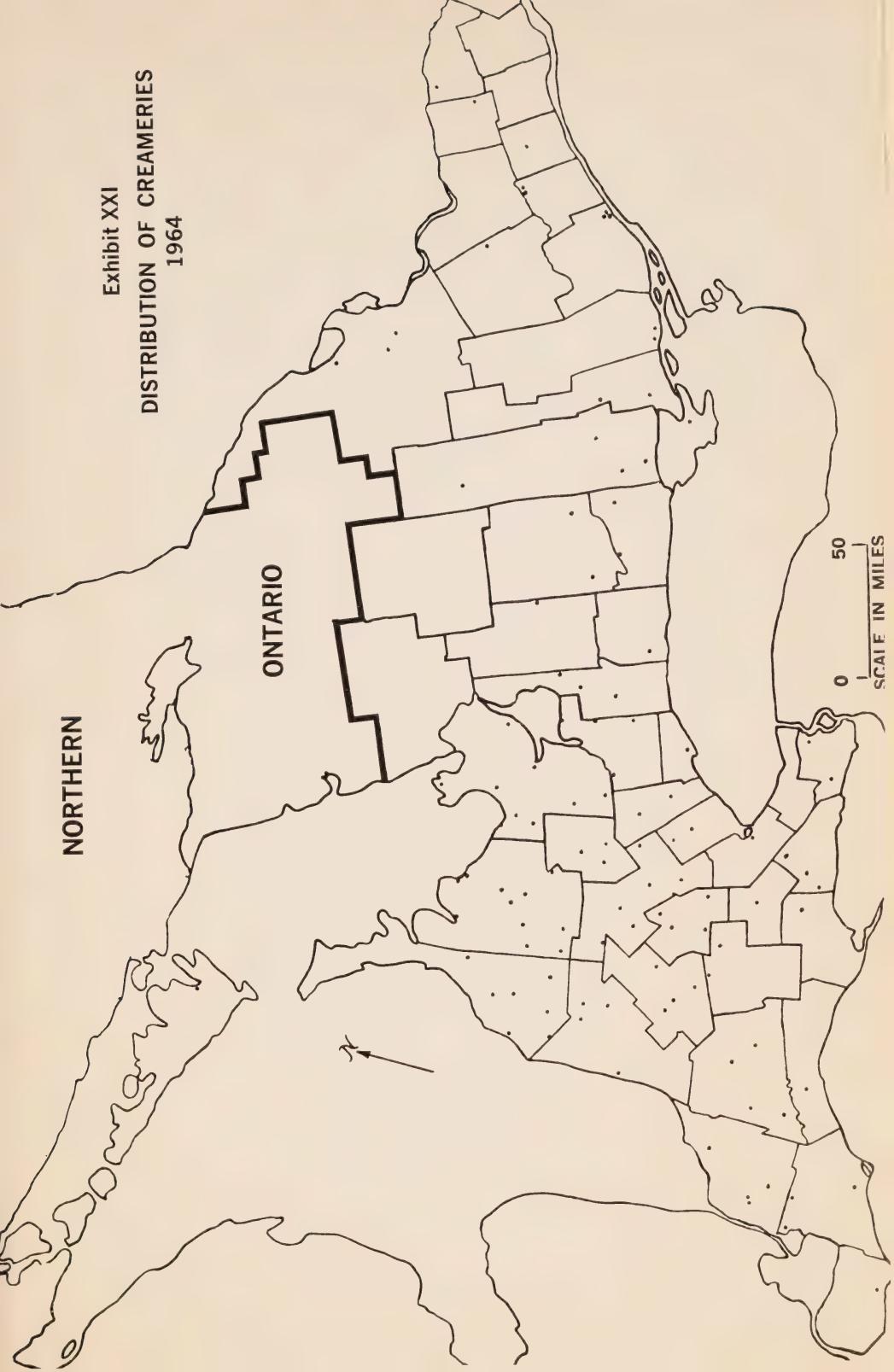
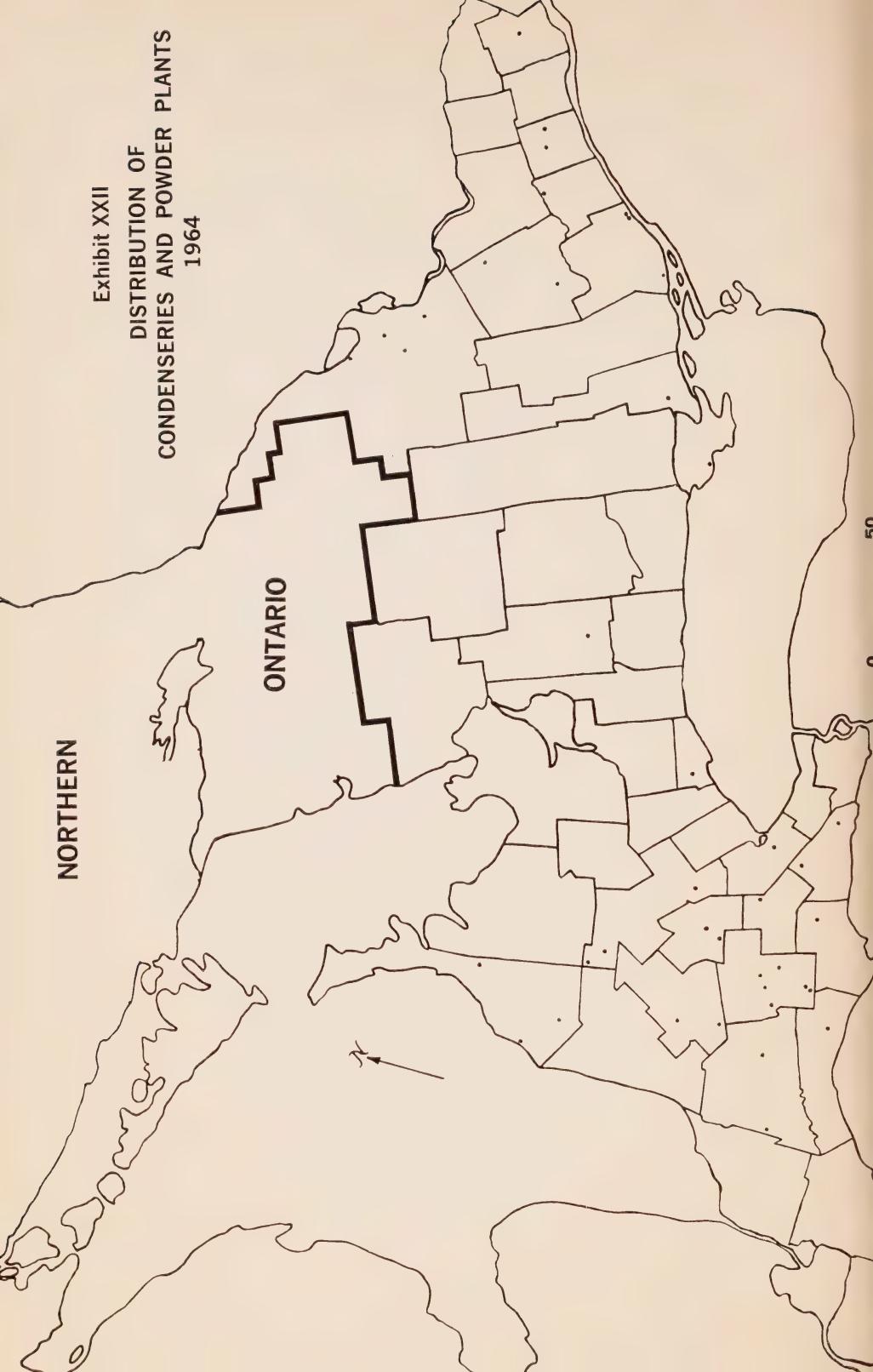


Exhibit XXII

DISTRIBUTION OF
CONDENSERIES AND POWDER PLANTS
1964

NORTHERN

ONTARIO



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